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Catalogue

LIST

OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

33131

BRITISH MUSEUM.

PART II.—LEPIDOPTERA HETEROCERA.

PRINTED BY ORDER OF THE TRUSTEES.
LONDON, 1854.

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INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of the specimens of Lepidopterous Insects contained in the collection of the British Museum, indicating at the same time the peculiarities of each, as regards variation of character, locality, and the source from whence it has been derived. With this view, the different individuals of each species contained in the collection are indicated by the letters *a*, *b*, *c*, &c., following the name of the species and its synonymes, and the description, if it appeared to have been before undescribed.

This part of the Catalogue of Lepidopterous Insects has been prepared and the new species described by Mr. FRANCIS WALKER, so well known for his attention to this order of Insects.

The continuation is in hand, and will follow as soon as it is completed.

JOHN EDWARD GRAY.

British Museum,
May 1st, 1854.

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

Tribe 6. BOMBYCITES.

Corpus plerumque crassum, plus minusve cylindricum. Caput parvum. Palpi breves, sæpissime cylindrici. Proboscis brevis aut nulla. Antennæ maris sæpissime pectinatæ, fœminæ nonnunquam serratæ aut subpectinatæ. Thorax raro cristatus. Alæ sæpissime elongatæ, trigonæ, deflexæ, integræ. Larvæ pedibus sexdecem analibus nonnunquam spuriis.

Bombycites p., *Latr.*
Bombycidæ p., *Leach.*
Noctuo-Bombycides, *Herr-Schæff.*

Fam. 1. LITHOSIIDÆ.

Corpus gracile, elongatum. Ocelli plerumque nulli. Proboscis plerumque capite longior. Palpi capite non longiores, cylindrici; articulus 3us 2o brevior aut non longior. Antennæ sæpissimæ mediocres, graciles, setaceæ; articulus 3us 2o brevior aut non longior. Thorax non cristatus. Alæ plerumque subellipticæ; posticæ sæpe plicatæ, abdomen subinvolventes. Frenulum conspicuum. Alæ anticæ apice rotundatæ vena 1a alarum posticarum in angulum ani excurrens; 5a 4æ multo propior quam 6æ; 6a et 7a ex angulo antico areolæ mediæ, approximatæ, e puncto aut ramo communi; 8a e areola media. Larvæ herbivoræ, vel lichenivoræ, sæpe dorso pilis fasciculatis vestitæ. Pupæ breviusculæ, sæpius subcontractæ, segmentis immobilibus.

Some of the genera contained in this family form connecting links with the Zygænides, Noctuides, Geometrides, Pyralides, Tortricides, and Tineides.

Lithosiidæ, *Steph. Illustr. Brit. Ent. Haust.* ii. 88.
Lithosiides, *Boisduval; Herrich-Schæffer.*

Genus 1. ILLIBERIS.

Corpus validum, lineare. Palpi acuminati, brevissimi, capitis dimidio non longiores; articulus 3us minimus. Antennæ maris corpore breviores, late bipectinatæ, ramis pubescentibus. Abdomen maris apice bilobatum, alas posticas facile superans. Pedes graciles; tibiæ posticæ calcaribus mediis nullis, apicalibus brevissimis.

Body stout, linear. Palpi acuminated, very short, not more than half the length of the head; third joint very minute. Antennæ of the male shorter than the body, deeply pectinated; branches pubescent, decreasing in length from near the base to the tips. Abdomen of the male slightly bilobed at the tip, extending some distance beyond the hind wings. Legs slender; hind tibiæ with no middle spurs, their hind spurs very small. Wings rather short and narrow; six superior veins, and four inferior; discal fold distinct along the discal areolet; submedian and internal veins parallel.

This genus is more nearly allied than the other *Lithosiidæ* to the *Glaucopidæ*.

1. Illiberis Sinensis.

Mas. *Nigro-viridis, linearis; antennæ late pectinatæ; alæ nigræ.*

Male. Blackish green, linear. Palpi very short; third joint extremely short. Antennæ deeply pectinated, about three-fourths of the length of the body. Wings black; discal fold distinct along the discal areolet, from whence proceed four hind veinlets and six front veinlets. Hind wings about two-thirds of the length of the fore wings. Legs black; apical spurs of the hind tibiæ very short. Length of the body 4½ lines; of the wings 13 lines.

a. China. Presented by G. T. Laye, Esq.

Genus 2. PINTIA.

Mas. Corpus sat validum. Caput conicum; facies valde convexa. Palpi brevissimi. Antennæ corpore vix breviores. sat late bipectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus mediis nullis, posticis brevissimis. Alæ sat amplæ.

Male. Head conical; face very convex. Palpi very short. Antennæ nearly as long as the body, rather deeply pectinated; the

branches decreasing in length from near the base to the tips. Abdomen slightly tapering from the base to the tip, not extending beyond the hind wings. Legs slender; hind tibiæ with no middle spurs, their apical spurs very small. Wings rather long and broad; four superior veins and four inferior, first and second inferior almost united at the base; submedian and internal veins parallel.

Allied to *Chalcosia*.

1. PINTIA METACHLOROS.

Obscure fusca; antennæ virides; palpi et pedes subtus albi; abdomen subtus testaceum; alæ anticæ basim versus virides, subtus striga basali fasciaque subarcuata discali albidis; posticæ virides, subtus areolarum discis ex parte albidis.

Dark brown. Antennæ green. Palpi and legs white beneath. Abdomen testaceous beneath. Fore wings tinged with green towards the base, especially beneath, where there is a whitish streak towards the base, and an oblique slightly curved discal whitish band beyond the middle. Hind wings bluish green with brown borders; under side with most of the disks of the areolets more or less whitish, which hue may be slightly traced above. Length of the body 5½ lines; of the wings 17 lines.

a. Java. From Mr. Walker's collection.

Genus 3. CTENUCHA.

Palpi triarticulati, capite longiores, breviter squamosi; articuli 1us et 2us æquales; 3us paullo brevior. Antennæ maris late pectinatæ, fœm. subpectinatæ. Anus fasciculatus. Alæ planæ; anticæ incumbentes, oblongæ, angulis apicali et anali rotundatis; posticæ plicatiles. Tibiæ posticæ medio et apice bicalcaratæ.

Family Ctenuchidæ: Genus Ctenucha, *Kirby, Fauna Bor. Amer.* iv. 305.

Glaucopis (Ctenucha), *Harris, Descr. Cat. N. Amer. Sphing.* 38.

Antennæ pectinated on both sides in the male, thickened in the middle with extremely short pectinations in the female. Tongue moderate, spirally rolled. Palpi slender, rising beyond the clypeus, nearly cylindrical and obtuse, covered with small close scales, somewhat hairy at the base. Wings in some species rather narrow, in others widened and rounded at the tips; discal areolet of the hind wings closed by an angulated vein. Body nearly cylindrical, enlarged a little behind in the female, with a few minute tufts at the sides of the segments, obtuse and slightly tufted at the tip; first

abdominal segment with a conspicuous tubercle on each side. Spurs of the hind tibiæ small, four in number, two terminal, and two beyond the middle of the tibiæ.

Group 1.

Corpus cylindricum, gracile, metallicum. Palpi porrecti, capite paullo longiores; articulus 2us 1o longior; 3us acuminatus, 2o brevior. Proboscis thorace vix brevior. Antennæ corpore multo breviores, maris late pectinatæ, fœminæ subpectinatæ. Alæ sat latæ, elongato-trigonæ; anticæ postice subangulares. Abdomen alas posticas perpaullo superans. Pedes graciles; protibiæ maris bidentatæ, fœm. unidentatæ; posticæ calcaribus quatuor sat longis.

Body cylindrical, slender, metallic. Palpi porrect, a little longer than the head; second joint longer than the first; third acuminated, shorter than the second. Proboscis nearly as long as the thorax. Antennæ much shorter than the body, deeply pectinated in the male, slightly pectinated in the female. Wings moderately broad, elongate trigonate. Fore wings slightly angular by the tips of the hind wings; median and subcostal veins connected by nearly upright veinlets at the tip of the discal areolet in which the discal fold is distinct and is connected beyond with the first inferior vein; second, third, and fourth inferior veins distinct; first and second having a common base at the tip of the areolet; third very near them; fourth more than four times more remote from the third, than the third is from the second; two superior veins, the second forked before half its length. Legs slender; fore tibiæ of the male bidentate, of the female unidentate beneath; hind tibiæ with four moderately long spurs. Abdomen extending very little beyond the hind wings.

1. Ctenucha Latreillana.

Fusca; caput aurantium; antennæ nigræ; humeri aurantii; abdomen cyaneum.

Ctenucha Latreillana, *Kirby, Fauna Bor. Amer.* iv. 305, 1.
Glaucopis (Ctenucha) Latreillana, *Harris, Descr. Cat. N. Amer. Sphin.* 39, 5.

New Hampshire. Maine. Canada. Nova Scotia.

a—g. Nova Scotia. From Lieut. Redman's collection.
h. United States. Presented by E. Doubleday, Esq.
i, j. ——— ? From Mr. Children's collection.
k, l. Canada. Presented by Dr. Barnston.

Group 2. PHILOROS.

Corpus cylindricum, gracile, metallicum. Palpi porrecti, capite paullo longiores; articulus 2us 1o longior; 3us brevis, conicus, 2i dimidio brevior. Antennæ corpore multo breviores, maris late pectinatæ, fœminæ mediocriter pectinatæ. Alæ angustæ, elongato-trigonæ; anticæ postice subangulatæ. Abdomen alas posticas triente superans. Pedes graciles; tibiæ anticæ subtus dentatæ, posticæ calcaribus quatuor sat longis.

Body cylindrical, slender, metallic. Palpi porrect, a little longer than the head; second joint longer than the first; third short, conical, not half the length of the second. Proboscis a little longer than the thorax. Antennæ much shorter than the body, of the male deeply, of the female moderately pectinated. Wings narrow, elongate-trigonate. Fore wings slightly angular by the tips of the hind wings; median and subcostal veins connected by nearly upright veinlets at the tip of the discal areolet in which the discal fold is distinct, and is connected beyond it with the first inferior vein; four distinct inferior veins like those of the first division, but the first and the second are not connected at the base; two superior veins, the second forked at half its length. Abdomen extending about one-third of its length beyond the hind wings. Legs slender; fore tibiæ of the male dentate beneath; hind tibiæ with four moderately long spurs.

2. Ctenucha rubriceps.

Fusca, subtus nigra; caput et palpi basi rufo-hirta; alæ albo ciliatæ, posticæ cyaneo-nigræ; maris *abdomen supra viride.*

Lithosia rubriceps, *MSS.*

Dark brown, black beneath. Head and palpi towards the base clothed with bright red hairs. Antennæ moderately pectinated. Wings fringed with white, moderately broad. Fore wings with blackish veins. Hind wings bluish black. Abdomen of the male sericeous green above. Length of the body 5 lines; of the wings 15 lines.

a. New Grenada. From M. Jurgens' collection.
b. Venezuela. From M. Becker's collection.

3. Ctenucha venosa.

Fusca, subtus nigra; caput et thorax antice maris *rufo*, fœminæ *flavo-hirta; thorax flavo bivittatus; alæ anticæ albido lineatæ: posticæ et abdomen* maris *cyanea*, fœminæ *nigricantia.*

Lithosia venosa, *MSS.*

Dark brown, black beneath. Head and fore part of the thorax clothed with bright red hairs in the male, and with yellow hairs in the female. Antennæ of the male rather deeply, of the female moderately pectinated. Thorax with two yellow stripes. Wings fringed with white, moderately broad. Fore wings with four yellowish white stripes; first costal; second short, near the tip; third and fourth, the third forked near the tip. Hind wings and abdomen of the male dark blue, of the female blackish. Length of the body 5½—6 lines; of the wings 15—16 lines.

a. ———? Presented by E. Doubleday, Esq.
b. Venezuela. From M. Becker's collection.
c. Mexico. From Mr. Glennie's collection.

4. Ctenucha ruficeps.

Cyanea; capitis vertex et prothorax subtus coccineo-hirti; palpi basi coccinei; thorax tegulis duabus lateralibus; humeri albi; pedes subtus albi; alæ nigro-fuscæ, basi cyaneæ, ex parte albo ciliatæ; anticæ costa vittaque discali interrupta albis; posticæ vitta basali discali alba.

Blue. Head above and thorax in front beneath clothed with crimson hairs. Palpi black, with crimson hairs towards the base. Proboscis black. Thorax with a lappet on each side, and a white spot on each shoulder. Legs white beneath. Wings blackish brown, blue at the base. Fore wings with a white costa, and a white interrupted stripe extending from the base to near two-thirds of the length in the disk. Hind wings with a white discal stripe tapering from the base to half the length. Length of the body 5½ lines; of the wings 14 lines.

a. Mexico. From M. Hartweg's collection.

Group 3. SCEPSIS.

Corpus cylindricum, longum, gracile, vix metallicum. Palpi oblique ascendentes, capite non longiores; articulus 2us lo multo longior; 3us obtusus, breviconicus, 2i triente brevior. Proboscis thorace paullo longior. Antennæ corpore multo breviores, maris mediocriter pectinatæ, fœminæ subpectinatæ. Alæ perangustæ; elongato-trigonæ; anticæ postice vix angulatæ. Abdomen alas posticas plus ejus dimidio superans. Pedes gracillimi; tibiæ anticæ subtus dentatæ; posticæ calcaribus quatuor minimis.

Body cylindrical, long, slender, slightly hairy, hardly metallic. Palpi inclined obliquely upward, not longer than the head; second joint much longer than the first; third obtuse, slightly conical, not one-third of the length of the second. Proboscis a little longer than the thorax. Antennæ very much shorter than the body, moderately pectinated in the male, very slightly pectinated in the female. Wings long, very narrow, elongate-trigonate. Fore wings opaque, hardly angular by the tips of the hind wings; veinlets at the tip of the discal areolet forming angles, discal fold distinct throughout; the four inferior veins distinct; two superior veins, the second forked at much beyond half its length. Hind wings hyaline in the disk. Abdomen extending for a little more than half its length beyond the hind wings. Legs very slender, rather long; fore tibiæ of the male dentate beneath; hind tibiæ with four very small spurs.

5. Ctenucha fulvicollis.

Schistacea; caput et antennæ nigra; palpi basi, prothorax, pectorisque margo anticus ochracea; alæ subacutæ, sat angustæ; anticæ fusco-schistaceæ, margine costali cervino; posticæ apud medium semidiaphanæ. Long. alar. 15—16 lin.

Glaucopis unicolor fulvicollis, *Hübn. Samml. Exot. Schmett.* 1. *Lep.* ii. *Sphing.* i. *Pap.* iii. *Glaucopis* A. *Unicolores* B.

Glaucopis (Ctenucha) semidiaphana, *Harris, Descript. Cat. N. Amer. Sphin.* 38, 4.

Middle and Southern United States.

a—e. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

f—h. ——— ?

Group 4. AGLAOPE.

Corpus cylindricum, longum, gracillimum, non metallicum. Palpi minimi. Proboscis thoracis longitudine. Antennæ corpore multo breviores, maris late pectinatæ, fœminæ subpectinatæ. Alæ perangustæ, vix trigonæ; anticæ postice vix angulatæ. Abdomen alas posticas ejus dimidio superans, maris apice fasciculatum. Pedes gracillimi; tibiæ anticæ simplices; posticæ calcare unica minima apicali.

Aglaope, *Latr. Gen. Crust. et Ins.* iv. 214. *Boisd.*

Body cylindrical, long, extremely slender, not metallic. Palpi very minute. Proboscis as long as the thorax. Antennæ much shorter than the body, rather deeply pectinated in the male, slightly pectinated in the female. Wings extremely narrow, hardly trigonate. Fore wings very indistinctly angular by the tips of the hind wings; discal fold distinct in the discal areolet; the four inferior veins distinct; third a little more remote from the second than the second from the first; fourth twice further from the third than the third from the second; three superior veins, the third forked before half its length. Abdomen extending for full half its length beyond the hind wings, tufted at the tip in the male. Legs extremely slender; fore tibiæ simple in both sexes; hind tibiæ with no middle spurs and with but one very minute hind spur.

6. CTENUCHA AMERICANA.

Cyaneo-nigra; prothorax fulvus.

Aglaope Americana, *Boisd.; Griff. Anim. Kingd. Lep.*
Procris Americana, *Boisd. Spec. Gén. Lép.* i. pl. 16, f. 7. *Guér. Icon. Règne Anim. Ins.* pl. 84, bis, f. 11.
Procris dispar, *Harris, Cat. Ins. Mass.*
Procris Americana, *Harris, Descr. Cat. N. Amer. Sphin.* (*Amer. Journ. Sci. & Arts*, xxxvi. 2), 35.

"Blue-black; with a saffron-coloured prothorax, and a fan-shaped, somewhat bilobed, black caudal tuft. Larva hairy, green, with black bands; gregarious, and devours the leaves of the grape-vine, and undergoes its transformations in an oblong-oval, tough, whitish cocoon, which is fastened to a leaf."

a—c. Georgia. Presented by E. Doubleday, Esq.
d. ——— ?

Genus 4. LYCOMORPHA.

Corpus lineare, gracile, subcylindricum, non metallicum. Palpi breves, validi, porrecti, capite multo breviores; articulus 3us conicus, 2i quadrario non longior. Proboscis thorace paullo longior. Antennæ biserratæ aut subpectinatæ, corpore paullo breviores. Alæ angustæ, subfusiformes. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ anticæ non dentatæ; tibiæ posticæ calcaribus mediis nullis, apicalibus sat longis.

Lycomorpha, *Harris, Amer. Journ. Sci. & Arts*, xxxvi. 2.

Body linear, slender, nearly cylindrical, not metallic. Palpi short, stout, porrect, not near the length of the head; third joint conical, not more than one-fourth of the length of the second. Proboscis a little longer than the thorax. Antennæ biserrated or minutely pectinated, a little shorter than the body. Wings narrow, nearly fusiform; discal areolet long, rounded at the tip; discal fold distinct in the discal areolet; four distinct inferior veins; third a little more remote from the second than the second from the first; fourth twice further from the third than the third from the second; two superior veins, the second forked; subcostal vein emitting four oblique veinlets in front. Abdomen hardly extending beyond the hind wings. Legs rather stout; fore tibiæ not dentate; hind tibiæ with no middle spurs but with two moderately long apical spurs.

Lycomorpha, *Harris, Descr. Cat. N. Amer. Sphin.* (*Amer. Journ. Sci. & Arts*, xxxvi. 2), 37.
Glaucopis, p., *Westw.*
Zygæna, p., *Fabr.*; *Gmel.*

1. Lycomorpha Pholus.

Atra; alæ quatuor basi luteæ.

Zygæna Pholus, *Fabr. Sp. Ins.* ii. 166, 49; *Mant. Ins.* ii. 107, 61; *Ent. Syst.* iii. 1, 406, 7.
Sphinx Pholus, *Drury, Ins.* ii. pl. 28, f. 3.
Sphinx Zygæna Pholus, *Gmel. ed. Syst. Nat.* i. 5, 2399, 155.
Lycomorpha Pholus, *Harris, Amer. Journ. Sci. & Arts*, xxxvi. 2.
Glaucopis Pholus, *Westw. ed. Drury*, ii. pl. 28, f. 3.

a, *b*. ——— ? From Mr. Children's collection.
c. United States. Presented by E. Doubleday, Esq.
d. Nova Scotia. From Lieut. Redman's collection.
e. ——— ?

2. Lycomorpha centralis.

Mas. *Nigra; antennæ late pectinatæ; prothorax luteus; alæ quatuor triente basali lutea, anticæ basi postica nigra.*

Male. Antennæ rather deeply pectinated. Prothorax luteous. Wings luteous towards the base. Fore wings with the outline of the luteous part not oblique as in *L. Pholus*, and with a very short black streak on the hind border at the base. Length of the body 3½ lines; of the wings 12 lines.

a. ———? Presented by E. Doubleday, Esq.

3. Lycomorpha Coleoptrata.

Nigra; abdominis segmenta luteo marginata; thorax fulvo bivittatus; alæ anticæ basi fulvo strigatæ, fasciaque media angulosa testacea; posticæ macula magna subapicali lutea; pedes luteo fasciati.

Black. Palpi pale testaceous beneath. Thorax with a tawny stripe on each side. Hind borders of the abdominal segments luteous. Fore wings with tawny streaks at the base, and in the middle with an angular testaceous band, which beneath is luteous broad and hardly angular. Hind wings with a large luteous spot in a line with the band of the fore wings. Legs with luteous bands. Length of the body 7 lines; of the wings 14 lines.

a. Tapayos, Brazil. From Mr. Bates' collection.

Genus 5. JOSIA.

Corpus plerumque fere lineare et cylindricum. Palpi breves aut mediocres, non elongati; articulus 3us 2o plus minusve brevior. Antennæ maris sæpissime pectinatæ, fœminæ simplices. Abdomen alarum margines posticas nonnunquam, plerumque superans. Pedes graciles; tibiæ posticæ quadricalcaratæ, rarissime bicalcaratæ. Alæ angustæ, flavo luteo aut albo varii.

Phalæna, p., *Linn.; Cram.; Fabr.*
Hipocrita, p., *Hübn. Samml. Exot. Schmett.*
Josia, *Hübn. Verz. Schmett.* 176.
Ephialtias, *Hübn. Verz. Schmett.* 176.
Epidesma, *Hübn. Verz. Schmett.* 176.
Callimorpha, p., *Perty.*
Leucopsumia, *Hübn. Verz. Schmett.* 177.

Body generally nearly linear and cylindrical, varying in length and stoutness. Palpi variable as to length; in some species much shorter, in others a little longer than the head; third joint varying from one-eighth to one-half of the length of the second. Antennæ of the male generally more or less pectinated, sometimes simple; of the female generally simple, occasionally serrated. Abdomen extending as far as the hind wings, or beyond them. Legs mostly slender; hind tibiæ very generally with four spurs of various length; middle pair wanting in a few species. Wings black, generally narrow, adorned with yellow, luteous, or white stripes, bands, or spots.

Synopsis of the Species in the British Museum:—

I. Wings with four stripes.
  a. Stripes of the fore wings linear.
  b. Costa with a stripe. Fulvia.
  bb. Costa without a stripe.
  c. Hind wings pale along the inner border. Ligula.
  cc. Hind wings not pale along the inner border. aurimutua.
  aa. Stripes of the fore wings nearly triangular. mutans.
II. Wings pale with black borders.
  a. Veins black. auriflamma.
  aa. Veins not black.
  b. Hind wings with a black stripe. aurifusa.
  bb. Hind wings without a black stripe.
  c. Thorax not pale in front. basivitta.
  cc. Thorax pale in front. dispar.
III. Fore wings with a stripe and a band.
  a. Hind wings with a pale inner border. Abscissa.
  aa. Hind wings luteous with a black inner border.
  b. Fore wings with a slender black border. repleta.
  bb. Fore wings with a broad black border. immutata.
  aaa. Hind wings with an entire luteous stripe. integra.
  aaaa. Hind wings with a forked luteous stripe. Megæra.
IV. Fore wings with a stripe and a spot. fixa.
V. Fore wings with a band, basal dots and sub-apical spots. prolifera.
VI. Fore wings with a band and a spot.
  a. Hind wings with no pale spot. generans.
  aa. Hind wings with a pale spot above. mutata.

aaa. Hind wings with a pale streak beneath. clavata.
VII. Fore wings with two spots. monilis.
VIII. Fore wings with a band.
a. Hind wings with a discal dot beneath. erythomelas.
aa. Hind wings with a red stripe. Bryce.
aaa. Hind wings with a luteous stripe.
b. Abdomen without spots. Adiante.
bb. Abdomen spotted. Evippe.
aaaa. Hind wings with a yellowish white spot. cucostis.
aaaaa. Hind wings with a white spot.
b. Abdomen striped above. dorsivitta.
bb. Abdomen not striped above. abrupta.
aaaaaa. Hind wings with a white stripe beneath. Pilarge.
aaaaaaa. Hind wings all black or bluish black.
b. Fore wings with an orange or luteous band.
c. Abdomen striped above.
d. Band of the fore wings gradually dilated in front. emarginata.
dd. Band of the fore wings abruptly dilated in front. flammula.
cc. Abdomen not striped above.
d. Abdomen spotted on each side.
e. Abdomen with luteous spots. Celena.
ee. Abdomen with white spots. Melanitis.
dd. Abdomen not spotted.
e. Thorax not spotted.
f. Hind wings not dilated.
g. Body white beneath. consueta.
gg. Body not white beneath.
h. Band of the fore wings not widening hindward. Stygne.
hh. Band of the fore wings widening hindward. Erynnis?
ff. Hind wings dilated. dilatata.
ee. Thorax with two red spots. Militta.
bb. Fore wings with a yellow band. noctilux.
bbb. Fore wings with a testaceous band. Hyperia.
bbbb. Fore wings with a yellowish white band. Podarce.
bbbbb. Fore wings with a white band.
c. Hind wings deep black.
d. Sides of the thorax not testaceous. lanceolata.
dd. Sides of the thorax testaceous in front. Clite.
cc. Hind wings bluish black.
d. Head and prothorax with testaceous hairs. Ursula.

dd. Head and prothorax with red hairs.	Circe.
aaaaaaaa. Hind wings with luteous hind borders.	contracta.
IX. Fore wings with one spot.	collaris.

Group 1.

Corpus gracile, cylindricum, snblineare. Palpi porrecti, capite paullo longiores; articulus 2us lo multo longior; 3us elongato-conicus, acuminatus, 3i triente fere longior. Proboscis thorace paullo longior. Antennæ maris mediocriter pectinatæ, apice nudæ, fœminæ simplices graciles. Abdomen alas posticas fere ejus dimidio superans, maris lineare apice fasciculatum, fœminæ apice subdilatatum.

Body slender, cylindrical, nearly linear. Palpi porrect, a little longer than the head; second joint much longer than the first; third elongate-conical, acuminated, full one-third of the length of the second. Proboscis a little longer than the thorax. Antennæ of the male moderately pectinated, simple towards the tips; of the female simple and slender. Wings moderately broad, elongate-trigonate. Fore wings angular by the tips of the hind wings; discal fold very distinct in the discal areolet whose tip is angular; second and third inferior veins united for some distance from the base, and a little nearer to the first than to the fourth. Abdomen extending nearly half its length beyond the hind wings, linear and slightly tufted at the tip in the male; slightly dilated at the tip in the female. Legs slender; fore tibiæ of the male simple; hind tibiæ with four rather long spurs.

1. Josia Fulvia.

Fusco-nigra, luteo-flavo bivittata; alæ quatuor vitta discali costaque luteo-flavis; abdomen sublus albo vittatum.

Phalæna Noctua Fulvia, *Linn. Syst. Nat.* 836, 96; *Mus. Lud. Ulr.* 383. *Fabr. Sp. Ins.* ii. 217, 43; *Mant. Ins.* ii. 142, 62. *Seba*, iv. pl. 31, f. 11, 12; pl. 43, f. 27, 28. *Clerck, Icon.* pl. 55, f. 6. *Cram. Pap. Exot.* iii. 101, pl. 251, f. F. *Gmel. ed. Syst. Nat.* i. 5, 2546, 96.

Noctua Fulvia, *Fabr. Ent. Syst.* iii. 2, 32, 80.

Phalæna Bombyx Jesuita? *Fabr. Sp. Ins.* ii. 204, 145; *Mant. Ins.* ii. 132, 201. *Gmel. ed. Syst. Nat.* i. 5, 2445, 590.

Josia Fulvia, *Hübn. Samml. Exot. Schmett.* 19, 145, f. 289, 290.

Surinam.

The stripe on the fore wings is narrower than that on the hind wings, but both are variable as to breadth.

a—f. Venezuela. From Mr. Dyson's collection.
g. Honduras. From Mr. Dyson's collection.
h. Mexico. From Mr. Argent's collection.
i—l. ——— ?

2. Josia aurimutua.

Nigra; alæ quatuor vitta lutea; humeri abdominisque latera luteo maculata.

Black, with a luteous spot on each shoulder, and a row of luteous dots along each side of the abdomen. Wings with luteous stripes; those on the hind wings about twice the breadth of those on the fore wings; second and third inferior veins of the fore wings united to some distance from the base, twice further from the fourth than from the first. Length of the body 5 lines; of the wings 16 lines.

a. ——— ? Presented by Major-General Hardwicke.

3. Josia Ligula.

Nigra, luteo bivittata; subtus albidum; alæ quatuor vitta discali posticæque margine interno luteis.

Hipocrita tineiformis Ligula, *Hübn., Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Netrices*, ii. *Hipocrites*, A. *Tineiformes*, v. f. 1—4.

Josia Ligula, *Hübn. Verz. Schmett.* 176, 1813.

Body black, with a luteous stripe on each side. Wings with a luteous stripe on each. Hind wings luteous along the inner hind border. The stripes on the fore wings are generally a little narrower than those on the hind wings and somewhat convex in front; they are occasionally linear and variable as to breadth. Length of the body 5—6 lines; of the wings 14—18 lines.

a—f. Brazil. From Mr. Argent's collection.
g. Parà. Presented by J. P. G. Smith, Esq.
h. Parà. From Mr. Stevens' collection.
i. Demerara. Presented by J. S. Bowerbank, Esq.
j. Venezuela. From Mr. Dyson's collection.
k. South America. From Mr. Warwick's collection.
l, m. Brazil.

Var. β. Stripes on the fore wings straightened for two-thirds of the length where they are slightly indented in front. Sides of

the thorax not orange. Abdomen with an orange band at the base.

n. Brazil.

Note.—Some varieties as here mentioned may be distinct species. *Male.* Fore wings with three inferior veins; second and third united to some length from the base, nearer to the discal fold than to the fourth. *Fem.?* Four inferior veins; second and third as near to the first as to the fourth.

4. JOSIA AURIFUSA.

Atra, aurantiaco bivittata, subtus albo univittata; alæ aurantiacæ nigro marginatæ.

Deep black, with two orange stripes; under side with a white stripe. Fore wings with a fusiform orange stripe occupying the disk, and forked on the under side, and with a black border which is broadest towards the tip; three inferior veins; second and third united for a short space from the base, a little nearer to the discal fold than to the fourth. Hind wings orange for more than half the breadth and for about three-fourths of the length from the hind border; the orange part is more or less interrupted by an oblique black stripe which widens towards the hind border. Legs with whitish stripes. Length of the body 5—6 lines; of the wings 14—18 lines.

a—f. Venezuela. From Mr. Dyson's collection.
g. Brazil. From Mr. Argent's collection.

Group 2. SCEA.

Corpus gracile, cylindricum, sublineare. Palpi breves, porrecti, capite breviores; articulus 2us to multo longior; 3us conicus 2i triente non longior. Proboscis thorace paullo longior. Antennæ maris sat late pectinatæ, fœminæ simplices. Alæ latitudine mediocres, elongato-trigonæ; anticæ postice angulatæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ anticæ maris simplices; posticæ calcaribus quatuor sat longis.

Body slender, cylindrical, nearly linear. Palpi short, porrect, not so long as the head; second joint much longer than the first; third conical, not more than one-third of the length of the second.

Proboscis a little longer than the thorax. Antennæ rather deeply pectinated in the male, simple in the female. Wings as in the first division. Abdomen extending a little beyond the hind wings. Legs slender; fore tibiæ of the male simple; hind tibiæ with four rather long spurs.

5. JOSIA AURIFLAMMA.

Nigra; alæ anticæ aurantiacæ nigro venosæ, quadraria apicali costaque nigris.

Male. Second and third veins of the fore wings united to a long distance from the base which is nearer to the first vein than to the fourth. *Fem.* Second and third veins united to a long distance from the base which is about thrice nearer to the first than to the fourth.

Josia auriflamma, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, viii. *Callimorphæ*, B. *Variegatæ*, 2, f. 1—4.
Calimorpha nervosa, *Perty, Del. Anim. Artic. Bras.* pl. 32, f. 7.

a. Brazil. From Mr. Stevens' collection.
b. Rio Janeiro. Presented by J. P. G. Smith, Esq.
c, d. Brazil.
e. ——— ?

Group 3. CALOSOMA.

Corpus gracile, cylindricum, lineare. Palpi porrecti, capite breviores; articulus 3us conicus, 2o triplo brevior. Proboscis vix thorace longior. Antennæ in utroque sexu simplices. Alæ sat latæ, elongato-trigonæ; anticæ postice subangulatæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ anticæ in utroque sexu dentatæ; posticæ calcaribus quatuor sat longis.

Calosoma, *Geyer, Zutr. Samml. Exot. Schmett.*

Body slender, cylindrical, linear. Palpi short, porrect, not so long as the head; third joint conical, not more than one-third of the length of the second. Proboscis hardly longer than the thorax. Antennæ simple in both sexes, more than half the length of the body. Wings moderately broad, elongate-trigonate. Fore wings angular by the tips of the hind wings, &c., like *Josia*. Abdomen extending a little beyond the hind wings; appendages of the male large, falcate. Legs slender; fore tibiæ dentate in both sexes; hind tibiæ with four rather long spurs.

6. Josia fixa.

Mas. *Nigra; abdominis latera aurantiaco anguste vittata; alæ anticæ aurantiacæ, margine et triente apicali nigris, hac obsolete aurantiaco maculata; posticæ vitta angusta discali margineque interno luteis.*

Black. Abdomen with a slender orange stripe on each side; appendages of the male testaceous. Fore wings with an orange stripe which occupies the disk and widens as far as the hind angle where it is obliquely truncated, an indistinct orange spot near the tip; first and second inferior veins nearly close at the base; third about four times nearer to the second than to the fourth. Hind wings with the inner border luteous and with a slender partly interrupted luteous stripe in the disk. Length of the body 5 lines; of the wings 15 lines.

a. Parà. From Mr. Stevens' collection.
b. Parà. Presented by J. P. G. Smith, Esq.

Var. β. Orange on the fore wings broader, more regularly triangular, with straight sides, less oblique at its tip. Luteous stripe on the hind wings mostly obsolete.

7. Josia emarginata.

Atra; abdomen albido supra unovittatum subtus bivittatum; alæ anticæ fascia obliqua aurantiaca antice dilatata et apud costam usque ad basim producta.

Black. Abdomen with a whitish stripe above and with two whitish stripes beneath. Fore wings with a broad oblique bright orange stripe which is twice broader in front than behind and extends along the fore border to the base; first and second inferior veins almost contiguous at the base; third a little further from the second than the second from the first; fourth four times further from the third than the third from the second. Legs with a hoary tinge. Length of the body 5 lines; of the wings 16 lines.

a. Brazil. From Mr. Mornay's collection.

8. Josia mutans.

Mas. *Nigra; abdominis latera aurantiaco latissime vittata; alæ anticæ vitta subtrigona apud medium dilatata et oblique truncata aurantiaca; posticæ vitta abbreviata sublineari margineque interno aurantiacis.*

Black. Abdomen with a very broad orange stripe on each side; appendages testaceous. Fore wings with a nearly triangular stripe which begins near the base and is obliquely truncated beyond the middle; it is convex in front and at the tip, and slightly concave beyond the middle; first and second inferior veins connected at the base; fourth thrice further from the third than the third is from the second. Hind wings with a forked orange stripe which occupies the base, and extends to two thirds of the length in the disk and along the inner border. Length of the body 5 lines; of the wings 16 lines.

a. Parà. From Mr. Bates' collection.

9. Josia mutata.

Fœm. *Nigra; abdominis latera aurantiaco anguste vittata; alæ anticæ fascia latissima basim versus attenuata maculaque subapicali aurantiacis; posticæ subtus semicirculo aurantiaco.*

Black. Abdomen with a slender orange stripe on each side. Fore wings traversed about the middle with a very broad slightly oblique orange band which is attenuated towards the base; a small orange spot near the tip; third inferior vein a little further from the second than the second is from the first; fourth about thrice further from the third than the third from the second. Hind wings with a small semicircular orange spot in the disk beneath. Length of the body 4½ lines; of the wings 15 lines.

a. Parà. From Mr. Bates' collection.

10. Josia generans.

Nigra; alæ anticæ macula magna obliqua discali parvaque subapicali aurantiacis.

Black. Abdominal appendages of the male testaceous. Fore wings with a short broad oblique orange band beyond the middle

and with a small orange spot near the tip; third inferior vein about twice further from the second than the second is from the first; fourth four times further from the third than the third from the second. Length of the body 4—5 lines; of the wings 14—15 lines.

a—c. Parà. Presented by J. P. G. Smith, Esq.

11. Josia erythromelas.

Atra; abdomen vittis duabus rufis; alæ anticæ fascia obliqua discali subtrigona rufa; posticæ subtus gutta discali rufa.

Deep black. Abdomen with a red stripe on each side. Fore wings with a large oblique subtriangular orange-red spot in the disk beyond the middle, attenuated hindward. Hind wings with a red dot on the under side in the disk beyond the middle. Length of the body 4½ lines; of the wings 13 lines.

a. Parà. From Mr. Bates' collection.

12. Josia Celena.

Mas. *Nigra; abdominis latera luteo guttata; alæ anticæ fascia lata subobliqua sublineari integra aurantiaca.*

Black. Abdomen with luteous dots on each side; appendages testaceous. Fore wings with a broad entire slightly oblique nearly linear stripe; third inferior vein a little nearer to the second than the second is to the first; fourth rather further from the third than the third is from the first. Length of the body 4½ lines; of the wings 15 lines.

a. Brazil. From Mr. Bates' collection.

13. Josia clavata.

Mas. *Nigra; alæ anticæ vitta securiformi et macula subapicali posticæque macula subtus discali aurantiacis.*

Black. Abdominal appendages ferruginous. Fore wings with an orange stripe which at the middle is dilated into a subtriangular form, and with an orange short oblique stripe near the tip; first and second inferior veins almost contiguous at the base; fourth nearly

thrice further from the third than the third is from the second. Hind wings with an orange streak in the disk beneath. Length of the body 5 lines; of the wings 16 lines.

a. Parà. Presented by Gordon Graham, Esq.

14. Josia flammula.

Nigra; alæ anticæ fascia perobliquæ lutea, apud costam fere ad basim producta.

Calosoma flammula (Sphinx papilionoides, Glaucopis dubia), *Geyer, Zutr. Samml. Exot. Schmett.* 14, 319, f. 639, 638.

Java.

Nearly allied to *J. emarginata*, but smaller; the band on the fore wings paler, more oblique, not dilated in front until the fore border where it widens towards the base, its outer side slightly indented in front.

a. Brazil. From Mr. Argent's collection.

15. Josia basivitta.

Mas. et Fœm. *Nigra; alæ anticæ luteæ, margine et triente apicali luteis;* fœm. *corpus subtus albidum; abdominis latera luteo vittata.*

Black. Fore wings luteous, which colour is bordered with black and terminates obliquely at two-thirds of the length; the black border is broader behind than in front except at the end of the luteous part. *Male.* Appendages testaceous. *Fem.* Body whitish beneath. Fore wings with a black streak extending near the hind border from the base; luteous part terminating more obliquely than in the male; inferior veins like those of *J. Celena*. Length of the body 6 lines; of the wings 18 lines.

a. ———? Presented by E. Doubleday, Esq.
b. Brazil.

16. Josia dispar.

Nigra; cvput subtus et thorax margine antico lateribusque luteo-hirta; alæ anticæ pallide rufæ, nigro late marginatæ.

Black. Head beneath, thorax in front and on each side clothed with luteous hairs. Fore wings pale red, with broad black borders which occupy one-fourth of the length at the tips and behind and extend in a narrow stripe along the inner border. Length of the body 5 lines; of the wings 14 lines.

a. ——— ? Presented by E. Doubleday, Esq.

17. Josia Abscissa.

Atra; abdomen aurantiaco bivittatum; alæ anticæ bistriente basim versus plus minusve truncatæ fasciaque brevi subarcuata obliqua subapicali aurantiacis; posticæ macula discali variabili nonnunquam supra obsoleta margineque interno aurantiacis.

Hipocrita tineiformis Abscissa, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Veræ* vi. *Hipocritæ A. Tineiformes*, b. f. 1—4.

Black. Abdomen with an orange stripe on each side. Fore wing with a triangular orange blotch, oblique at the tip and two-thirds of the wing except the black border which is broadest in front towards the base; a short oblique slightly curved orange band near the tip; second inferior vein much nearer to the first than to the third; fourth more than twice further from the third than the third is from the second. Hind wings with an orange inner border and in the disk with an orange stripe which widens from the base along two-thirds of the length. Length of the body 5 lines; of the wings 16 lines.

Var. β. Abdomen orange beneath except at the tip and with a broad orange stripe above. Subapical bands of the fore wings very short. Stripes of the hind wings indented in front near the base.

Var. γ. Orange part of the fore wings extending almost to the base and interrupting part of the black fore border; a short black streak along the black hind border. Stripes of the hind wings more indented than in *Var.* β.

Var. δ. The orange blotches shortened towards the base, and occupying only one-third of each fore wing. Orange stripe in each hind wing contracted to an oblong spot which is much larger beneath than above.

Var. ε. Hind wings black above, with an orange spot in the disk beneath.

a—e. Parà. Presented by J. P. G. Smith, Esq.
f. Parà. From Mr. Bates' collection.

18. Josia repleta.

Nigra; abdomen luteum, apice vittaque dorsali nigris; alæ luteæ margine in anticis tenui in posticis lato, nigro; anticæ apice fasciam luteam includente nigra.

Black. Abdomen luteous, except the tip and a dorsal stripe which are black. Fore wings luteous with a slender black border; apical fourth or third part black, including a short oblique slightly curved luteous band; third inferior vein nearly twice further from the second than the second is from the first; fourth four times further from the third than the third is from the second. Hind wings luteous with a black border which is broad at the tip and behind, but does not extend to the inner margin. Length of the body 5 lines; of the wings 18 lines.

Var. β. Hind wings with two black streaks.

a. Parà. Presented by W. W. Saunders, Esq.
b. Parà. From Mr. Bates' collection.

19. Josia immutata.

Nigra, luteo bivittata; alæ anticæ disco usque ad bistrientem fasciaque brevi obliqua subarcuata subapicali luteis; posticæ luteæ, nigro late marginatæ.

Black, with a luteous stripe along each side. Fore wings luteous with a broad border and with the apical third part black, the latter includes a short oblique slightly curved band; first inferior vein about thrice nearer to the second than the second is to the third; fourth twice further from the third than the third is from the second. Hind wings luteous with a broad black border which is very broad near the tip in front and towards the base behind. Length of the body 5—6 lines; of the wings 18—20 lines.

a. Brazil. From Mr. Stevens' collection.
b. Brazil. From Mr. Argent's collection.
c. Brazil. From Mr. Bates' collection.
d. Brazil. Presented by the Entomological Club.
e, f. Brazil.

Group 4. PHALCIDON.

Corpus gracile, sublineare, sat longum. Palpi ascendentes, capite vix breviores; articulus 3us acuminatus, 2o brevior. Antennæ *maris* late pectinatæ, *fœminæ* simplices. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor sat longis, anticæ *maris* subtus dentatæ. Alæ angustæ aut mediocri latitudine.

Body slender, nearly linear, rather long. Palpi vertical, nearly as long as the head; third joint acuminated, rather shorter than the second. Antennæ shorter than the body, deeply pectinated along five-sixths of the length in the male, simple in the female. Abdomen extending for one-third of its length beyond the hind wings. Legs slender; fore tibiæ of the male dentate beneath; hind tibiæ with four rather long spurs. Wings narrow or of moderate breadth.

20. Josia integra.

Nigra, luteo bivittata, subtus albo vittata; alæ anticæ vitta postica abbreviata fasciaque obliqua subapicali luteis; posticæ vitta postica brevi integra lutea.

Black. Head, sides of the body above and of the pectus luteous; a slender white stripe beneath. Fore wings with a luteous stripe extending near the hind border and hardly widening outwards, very obliquely truncated beyond the middle; near the tip there is a short luteous band which is more remote from the stripe, more oblique and more attenuated in front than is that of *J. incisa*. Hind wings with a luteous stripe along the inner border and a short part of the hind border where it has no incision. Length of the body 5 lines; of the wings 14 lines.

a. Honduras. From Mr. Dyson's collection.

This may prove to be a variety of *J. Megæra*.

21. Josia Megæra.

Nigra, luteo bivittata, subtus alba; alæ anticæ vitta postica abbreviata fasciaque obliqua subapicali luteis; posticæ vitta postica incisa margineque apicali luteis.

Hipocrita tineiformis Megæra, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Veræ*, vi. *Hipocritæ A. Tineiformes* a. f. 1—4.

Josia Megæra, *Hübn. Verz. Schmett.* 176, 1812.

Black, with two luteous stripes, white beneath. Head luteous. Prothorax on each side with a luteous mark which is continued in a stripe along each side of the pectus. Thorax with two luteous spots on each side. Fore wings with a luteous stripe which extends near the hind border and widens from the base to beyond the middle where it is very obliquely truncated; a short very oblique luteous band near the tip. Hind wings with a luteous stripe along the inner border and part of the hind border where it has a deep incision, and is connected with the luteous fringe of the tip. Length of the body 4½—5½ lines; of the wings 13—15 lines.

a—d. Venezuela. From Mr. Dyson's collection.
e. Parà. From Mr. Johnson's collection.
f, g. Brazil. Presented by E. Doubleday, Esq.
h. ——— ? From Mr Milne's collection.

22. Josia prolifera.

Nigra, subtus albida; palpi lutei; thorax albo guttatus; abdomen albo trivittatum; alæ anticæ guttis basalibus maculisque duabus subapicalibus albis, fascia media lata lutea; posticæ fascia abbreviata basim versus attenuata lutea.

Black, whitish beneath. Palpi luteous. Thorax with four white dots in front. Abdomen with three white bands, the middle one of spots. Fore wings with some white dots at the base, with a broad luteous outwardly angular band on the middle, and with two white spots near the tip. Hind wings with a broad luteous band which is broadest and attenuated towards the base in front, and does not extend to the hind border. Legs whitish. Length of the body 5½ lines; of the wings 14 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

Group 5. EPHIALTIAS.

Corpus longum, gracile, lineare, cylindricum. Palpi ascendentes, capite multo breviores; articulus 3us conicus, 2i quadrario non longior. Antennæ *maris* mediocriter pectinatæ, *fœminæ* simplices. Abdomen longum, alas posticas dimidio (*mas*) aut quadra-

rio (*fœm.*) superans. Pedes graciles; tibiæ posticæ calcaribus quatuor sat longis, anticæ *maris* subtus dentatæ. Alæ angustæ aut latitudine mediocri.

Ephialtias, p., *Hübn. Verz. Schmett.* 176.

Body long, slender, linear, cylindrical. Palpi much shorter than the head, vertical; third joint conical, not more than one-fourth of the length of the second. Antennæ of the male pectinated but not deeply to three-fourths of the length; of the female simple. Abdomen long, extending for half its length in the male, and for one-fourth of its length in the female, beyond the hind wings. Legs slender; fore tibiæ of the male slightly dentated beneath; hind tibiæ with four moderately long spurs. Wings narrow, or of moderate breadth.

23. Josia Adiante.

Nigra, subtus albida; alæ anticæ fascia perobliqua posticæque vitta lata antica luteis.

Black. Body, palpi and legs whitish beneath. Fore wings with a very oblique luteous band; its hind end by the tips of the hind wings. Hind wings with a broad luteous stripe which extends from the base near the fore border along full three-fourths of the length. Length of the body 5½ lines; of the wings 14 lines.

a. ——— ? Presented by E. Doubleday, Esq.

24. Josia Bryce.

Nigra, subtus albida; abdomen flavo trivittatum; alæ anticæ fascia obliqua mar. *lutea* fœm. *albida; posticæ rufæ nigro marginatæ.*

Black, whitish beneath. Thorax with a yellow mark on each side in front. Abdomen with three yellow stripes which are interrupted in the male. Fore wings with an oblique band beyond the middle, short and luteous in the male, longer and whitish in the female. Hind wings bright red with broad black borders. Length of the body 5—6 lines; of the wings 15—16 lines.

a. Tapajos, Brazil. From Mr. Bates' collection.
b. Brazil. From Mr. Milne's collection.

25. Josia consueta.

Nigra, subtus alba aut cana; alæ anticæ fascia obliqua pallide lutea.

Black. Body, palpi and legs white beneath. Fore wings with a broad oblique pale luteous band beyond the middle; this band is rather broader behind than in front and is somewhat indented on the outer side. Length of the body 4—6 lines; of the wings 10—16 lines.

Var. β. Band not broader behind than in front, almost straight on the outer side.

Var. γ. Body hoary beneath. Band of the fore wings narrower especially in front.

a—d. Parà. From Mr. Bates' collection.
e. Parà. From Mr. Argent's collection.
f, g. Brazil. From Mr. Milne's collection.

26. Josia abrupta.

Nigra, subtus alba, ventre albo univittato; alæ anticæ macula obliqua oblonga discali luteo-flava; posticæ macula magna oblonga fere basali alba.

Hipocrita tineiformis abrupta, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii: *Bomb.* ii. *Netrices*, iii. *Hipocritæ A. Tineiformes*, b. f. 1—4.

Ephialtias abrupta, *Hübn. Verz. Schmett.* 176, 1820.

Black. Body, palpi and legs white beneath. Abdomen with a black stripe beneath. Fore wings with an oblong oblique luteous yellow band (in the male) or spot (in the female) in the disk beyond the middle. Hind wings with a rather large oblong white spot in the disk almost close to the base and not extending to the borders. Length of the body 5 lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.

Var. *Atra, subtus alba; alæ anticæ fascia obliqua discali lutea; posticæ vitta brevi basali variabili alba.*

Deep black. Body, palpi and legs white beneath. Fore wings with a slightly oblique luteous band in the disk beyond the middle; its hind end by the tips of the hind wings. Hind wings with a

white stripe proceeding from the base to the middle of the disk, variable in its length and outline, and rather larger in the female than in the male. Length of the body 5—6 lines; of the wings 14—16 lines.

Var. β. Fem. Abdomen with three white stripes; the middle one almost obsolete.

a, b. Parà. From Mr. Bates' collection.
c. Parà. Presented by J. P. G. Smith, Esq.
d. Parà. Presented by Gordon Graham, Esq.

27. Josia dorsivitta.

Nigra, subtus alba; thorax subtus flavo binotatus; abdominis dorsum albo trivittatum; alæ anticæ fascia obliqua discali luteo-flava; posticæ albæ margine et fere dimidio apicali nigris.

Black. Body, palpi and legs white beneath. Thorax with a yellow mark on each side beneath. Abdomen with three white stripes. Fore wings with a luteous yellow oblique band, beyond the middle and not extending to the borders. Hind wings white; base, borders except the inner one and nearly half the length from the tips black. Length of the body 5½ lines; of the wings 16 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

28. Josia Pilarge.

Atra, subtus alba; thorax antice luteo guttatus; abdomen cyaneo-nigrum, albo trivittatum; alæ anticæ fascia obliqua lutea subtus basi albo strigatæ; posticæ basi albo subpulverulentæ, subtus vitta brevi discali alba.

Deep black. Body, palpi and legs white beneath. Thorax with three luteous dots in front. Abdomen bluish black, with three white stripes. Fore wings with an oblique luteous band beyond the middle, streaked with white at the base beneath. Hind wings slightly powdered with white towards the base; under side with a white stripe from the inner border to the disk. Length of the body 5—5½ lines; of the wings 16 lines.

a, b. Parà. From Mr. Bates' collection.

Group 6. PHINTIA.

Mas. Corpus longum, subcylindricum, validiusculum. Palpi ascendentes, capitis longitudine; articulus 3us conicus, 2i sexta parte non longior. Antennæ corpore breviores, sat late pectinatæ. Abdomen longi-subfusiforme, alas posticas dimidio superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor sat longis, anticæ subtus dentatæ. Alæ longæ, angustæ.

Male. Body long, rather stout; nearly cylindrical. Palpi ascending, as long as the head; third joint conical, not more than one-sixth of the length of the second. Antennæ shorter than the body, rather deeply pectinated; the branches decreasing in length from near the base, and ceasing at seven-eighths of the length. Abdomen elongate-subfusiform, extending for half its length beyond the hind wings. Legs rather stout; fore tibiæ strongly dentated beneath; hind tibiæ with four rather long spurs. Wings rather long and narrow.

29. Josia Hyperia.

Nigra, subtus alba; thorax luteo trimaculatus; abdomen albo trivittatum; alæ anticæ fascia lata obliqua discali testacea; posticæ striga subobsoleta alba.

Black, snow-white beneath. Thorax with a luteous mark on each side and with a luteous dot in front above. Abdomen with three slender white stripes. Fore wings with a broad oblique testaceous band beyond the middle; its hind end by the tips of the hind wings. Hind wings with some almost obsolete white marks towards the base. Nearly allied to *J. consueta*, but the fore wings are rather broader and have paler bands. Length of the body 5½ lines; of the wings 15 lines.

a. Parà. From Mr. Bates' collection.

30. Josia Podarce.

Atra, subtus alba; alæ anticæ fascia brevi obliqua, posticæque macula maxima basali subflavescente albidis.

Black. Body, palpi and legs white beneath. Fore wings with a short oblique white band in the disk beyond the middle, slightly tinged with yellow. Hind wings with a very large yellowish white

spot very near the base and extending to the inner border. Length of the body 3½—4 lines; of the wings 10 lines.

a—c. Parà. Presented by J. P. G. Smith, Esq.
d. Parà. Presented by Gordon Graham, Esq.

31. JOSIA CERCOSTIS.

Atra, subtus alba; alæ anticæ fascia brevi obliqua discali pallide flava; posticæ pallide flavæ, nigro latissime marginatæ.

Deep black. Body, palpi and legs white beneath. Fore wings with a short oblique rather broad very pale yellow band in the disk beyond the middle. Hind wings very pale yellow, with black borders which are very broad, and especially so at the tips. Length of the body 6 lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.
b. Tapajos, Brazil. From Mr. Bates' collection.

32. JOSIA LANCEOLATA.

Atra, subtus alba; alæ anticæ fascia lata obliqua discali alba.

Deep black. Body, palpi and legs white beneath. Fore wings with a broad oblique snow-white band beyond the middle extending nearly to the hind border just beyond the tips of the hind wings. Length of the body 5½ lines; of the wings 18 lines.

a. Parà. From Mr. Bates' collection.

Group 7. ACTEA.

Corpus cylindricum, longum, sublineare, sat gracile. Palpi pilosi, capite vix breviores, ascendentes; articulus 3us gracilis, 2i quadrario non longior. Antennæ corporis dimidio paullo longiores, *maris* late pectinatæ, *fœminæ* validæ simplices. Abdomen oblanceolatum, alas posticas dimidio (*mas*) aut quadrario (*fœm.*) superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor sat longis, anticæ *maris* subtus dentatæ. Alæ sat breves, latitudine mediocri.

Ephialtias, p., *Hübn. Verz. Schmett.* 176, 1819.

Body rather slender, cylindrical, long, nearly linear. Palpi hairy, nearly as long as the head, ascending; third joint slender, not more than one-fourth of the length of the second. Antennæ little more than half the length of the body, deeply pectinated in the male to nearly two-thirds of the length, stout and simple in the

female. Abdomen slightly oblanceolate, extending in the male for half its length, in the female for one-fourth of its length, beyond the hind wings. Legs rather slender; fore tibiæ of the male dentate beneath; hind tibiæ with four rather long spurs. Wings rather short, moderately broad.

33. Josia Monilis.

Mas et Fœm. *Nigra, subtus alba; thorax luteo binotatus; abdomen luteo trivittatum; alæ anticæ maculis duabus luteis; posticæ vitta discali abbreviata lutea.*

Hipocrita tineiformis Monilis, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Veræ* vi. *Hipocritæ A. Tineiformes*, b. f. 1—4.
Ephialtias Monilis, *Hübn. Verz. Schmett.* 176, 1819.

Black, white beneath. Thorax with a luteous spot on each side in front. Abdomen with three luteous stripes which are more or less macular. Fore wings brownish black, with two luteous spots in the disk, one in front, the other behind, and the two forming on the underside the band by which the neighbouring species are distinguished. Hind wings with a luteous stripe in the disk, widening from the inner border towards the tip which it does not reach. Length of the body 6—7 lines; of the wings 16 lines.

Var. β. Spots of the fore wings nearly contiguous.

Var. γ. Spots very small, especially the hind one.

a. Parà. From Mr. Bates' collection.
b, *c*. Parà. Presented by J. P. G. Smith, Esq.
d. Brazil. From Mr. Milne's collection.

Group 8. MYONIA.

Mas. Corpus gracile, lineare, cylindricum, longissimum. Palpi ascendentes, arcuati, capite fere longiores; articulus 3us minimus, 2i octava parte non longior. Antennæ valde graciles, corpore breviores, subserratæ. Abdomen alas posticas plus dimidio superans. Pedes graciles; tibiæ anticæ subtus dentatæ; posticæ calcaribus quatuor sat longis. Alæ breviusculæ, latitudine mediocri.

Male. Body slender, linear, cylindrical, very long. Palpi vertical, curved, full as long as the head; third joint very minute, not one-eighth of the length of the second. Antennæ very slender, rather long, but shorter than the body, beset with short bristles or minutely serrated. Abdomen extending for more than half its length

beyond the hind wings. Legs slender; fore tibiæ dentated beneath; hind tibiæ with four rather long spurs. Wings rather short, moderately broad.

34. Josia Evippe.

Mas. *Nigra, subtus alba; caput subtus luteum; thorax luteo bivittatus; abdomen e maculis luteis univittatum; alæ anticæ fusco-nigræ venis pallidioribus maculaque transversa oblonga discali lutea; posticæ vitta discali lutea.*

Black. Body, palpi and legs white beneath. Head luteous on each side and beneath. Thorax with a short luteous stripe on each side in front. Abdomen with a white stripe on each side and with a dorsal stripe of luteous spots. Fore wings brownish black, with a transverse oblong slightly oblique luteous spot in the disk; veins brown. Hind wings with a rather broad discal luteous stripe which is interrupted near the inner border and does not reach the fore border. Length of the body 8 lines; of the wings 16 lines.

a. Tapajos, Brazil. From Mr. Bates' collection.

Var. *Fusco-nigra, subtus alba; capitis latera subtus lutea; prothorax luteo marginatus; thorax luteo bivittatus; alæ subtus basi albo strigatæ, anticæ fascia obliqua, posticæ vitta lata, discalibus luteis.*

Brownish black. Body, palpi and legs white beneath. Head luteous on each side beneath. Thorax with a slender luteous border in front, and with a luteous stripe along each side. Wings streaked with white towards the base beneath. Fore wings beyond the middle with a slightly oblique luteous band which is more or less shortened at each end; tips fringed with white. Hind wings with a luteous broad discal stripe which extends from the fore border to the inner border, near which it is occasionally narrower. Length of the body 5½—6 lines; of the wings 17—18 lines.

a, b. Ega, on the Amazon. From Mr. Bates' collection.

Group 9. EPIDESMA.

Corpus gracile, lineare, cylindricum, sat longum. Palpi validi, arcuati, ascendentes, capite fere longiores; articulus 3us conicus, minimus, 2i octava parte non longior. Antennæ graciles, corporis dimidio longiores, *maris* subsetosæ, *fœminæ* simplices. Abdomen

alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus duobus apicalibus sat longis, anticæ *maris* subtus dentatæ. Alæ breviusculæ, latiusculæ.

Epidesma, p., *Hübn. Verz. Schmett.* 176.

Body slender, linear, cylindrical, moderately long. Palpi stout, curved, ascending, full as long as the head; third joint conical, very minute, not more than one-eighth of the length of the second. Antennæ slender, more than half the length of the body, beset with short minute bristles in the male, simple in the female. Abdomen extending very little beyond the hind wings. Legs rather stout; fore tibiæ of the male dentated beneath; hind tibiæ with no middle spurs, their apical spurs rather long. Wings rather short and broad.

35. Josia Ursula.

Nigro-cinerea, subtus cana; caput et prothorax testacea; palpi testacei, supra nigri; abdomen glaucum, segmentorum marginibus posticis canis; alæ anticæ nigro-fuscæ fascia media alba recta integra venis canis; posticæ glaucæ.

Phalæna Ursula, *Cram. Pap. Exot.* iv. 107, pl. 345, f. E.

Grayish black, hoary beneath. Head, proboscis and prothorax testaceous. Palpi testaceous, black above and at the tips. Abdomen glaucous; hind borders of the segments hoary. Legs hoary. Fore wings blackish brown, with a bright white nearly upright and linear rather broad band at a little before two-thirds of the length; veins hoary. Hind wings glaucous. Length of the body 5½ lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.
b. South America. From Mr. Milne's collection.

Group 10. LEUCOPSUMIS.

Corpus lineare, cylindricum, sat validum, longitudine mediocri. Palpi ascendentes, corpore paullo longiores; articulus 3us apice oblique truncatus, 2i dimidio brevior. Antennæ in utroque sexu subpectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor breviusculis, anticæ *maris* subtus denticulatæ. Alæ subangulatæ sat amplæ.

Leucopsumis, p., *Hübn. Verz. Schmett.* 177.

Body linear, cylindrical, rather stout, moderately long. Palpi ascending, a little longer than the head; third joint obliquely truncated at the tip, less than half the length of the second. Antennæ slightly pectinated nearly to the tips in both sexes. Abdomen not extending beyond the hind wings. Legs slender; fore tibiæ of the male slightly dentated beneath; hind tibiæ with four rather short spurs. Wings moderately long and broad, slightly angular.

36. Josia Circe.

Fusco-nigra, subtus alba; caput et prothorax rufo-hirta; thorax albido tristrigatus; abdomen apice subtus luteum; alæ anticæ venis cinereis fasciaque apicem versus subobliqua alba; posticæ nigro-cyaneæ albo ciliatæ.

Var. *Nigra; prothorax subtus luteo-hirtus; palpi basi et proboscis lutea; abdomen apice subtus luteo-hirtum; pedes subtus albi; alæ anticæ fascia obliqua discali nonnunquam abbreviata alba.*

Phalæna Bombyx Circe, *Cram. Pap. Exot.* iii. 124, 147, pl. 263, f. D; pl. 274, f. E.
Leucopsumis Circe, *Hübn. Verz. Schmett.* 177, 1826.

Brownish black. Body and legs white beneath. Palpi and proboscis luteous. Head and thorax in front with red hairs. Thorax with three slight whitish streaks. Abdomen tinged with blue, luteous at the tip beneath. Fore wings with hoary veins and with a white slightly oblique band beyond the middle, occasionally shortened towards the hind border. Hind wings bluish black, fringed with white. Length of the body 4½—6 lines; of the wings 14—16 lines.

a—c. Venezuela. From Mr. Dyson's collection.
d. Parà. From Mr. Johnson's collection.
e. Brazil. Presented by E. Doubleday, Esq.
f. Brazil. From Mr. Milne's collection.

37. Josia collaris.

Atra; proboscis testacea; prothorax luteo-hirtus; alæ anticæ macula pone medium alba, subtus cyanescentes, albo fimbriatæ.

Phalæna (Noctua) collaris, *Drury, App.* iii.; *Ill. Exot. Ins.* iii. 27, pl. 21, f. 2.
Leucopsumis collaris, *Hübn. Verz. Schmett.* 177, 1825.

Gnophria? collaris, *Westw. ed. Drury*, iii. 28, pl. 21, f. 2.

Wing-veins gray or hoary. Spot of the fore wings rather larger beneath than above.

a. Rio Janeiro. From Mr. Johnson's collection.
b. Parà. From Mr. Johnson's collection.
c. Brazil. From Mr. Milne's collection.

38. Josia Clite.

Atra, subtus albida; thoracis latera antice testacea; alæ anticæ fascia lata integra subobliqua alba.

Deep black. Body, palpi and legs whitish beneath. Thorax testaceous on each side in front. Fore wings with a broad slightly oblique nearly linear white band, whose hind end is by the tips of the hind wings. Length of the body 5½ lines; of the wings 16 lines.

a. Parà. From Mr. Bates' collection.

Note.—This species does not quite agree with the preceding form, but will hardly form a distinct group.

Group 11. PHASIS.

Mas. Corpus cylindricum, sublineare, sat longum, validiusculum. Palpi pilosi, capite vix breviores; articulus 3us linearis, 2i quadrario non longior. Antennæ simplices, fere ad apices sensim incrassatæ. Abdomen alas posticas quadrario superans. Pedes validi; tibiæ anticæ non dentatæ; posticæ calcaribus quatuor longiusculis et validiusculis. Alæ latæ, non longæ.

Body cylindrical, nearly linear, rather long, moderately stout. Palpi hairy, nearly as long as the head; third joint linear, not more than one-fourth of the length of the second. Antennæ of the male simple, very slightly increasing in breadth from the base to near the tips which are attenuated. Abdomen extending to one-fourth of its length beyond the hind wings. Legs stout; fore tibiæ of the male not dentated beneath; hind tibiæ with four rather long and stout spurs. Wings broad, not long.

39. Josia noctilux.

Mas. *Aterrima; alæ anticæ fascia media subobliqua lætissime flava.*

Male. Very deep black. Fore wings with an entire slightly oblique nearly linear very pale and bright yellow band, which is slightly excavated on its inner side in front, and does not quite extend to the borders. Length of the body 7½ lines; of the wings 18 lines.

a. Tapajos, Brazil. From Mr. Bates' collection.

Group 12. SAGARIS.

Fœm. Corpus cylindricum, sublineare, sat longum et gracile. Palpi capitis longitudine; articulus 3us gracilis, conicus, 2i quadrario non longior. Antennæ graciles, simplices. Abdomen longi-subfusiforme, alas posticas perpaullo superans. Pedes graciles; tibiæ anticæ subtus incrassatæ et subdentatæ; posticæ calcaribus quatuor sat longis. Alæ latæ, non longæ. *Mas?* Antennæ simplices, extrorsum subincrassatæ.

Fem. Body nearly linear, cylindrical, moderately long and slender. Palpi as long as the head; third joint slender, conical, about one-fourth of the length of the second. Antennæ slender, simple. Abdomen elongate subfusiform, extending very little beyond the hind wings. Legs slender; fore tibiæ incrassated and slightly dentated beneath; hind tibiæ with four rather long spurs. Wings broad, not long. *Male?* Antennæ simple, very slightly increasing in breadth from the base to near the tips.

40. Josia Stygne.

Fœm. *Atra; alæ anticæ fascia obliqua media integra lineari lutea.*

Deep black. Fore wings with an oblique entire linear luteous band, which has slight and short undulations along each side, and does not quite extend to the borders; its hind end by the tip of the hind wing. Length of the body 7 lines; of the wings 20 lines.

a. Parà. From Mr. Bates' collection.

Mas? *Atra; caput, thorax et coxæ anticæ subtus valde hirta; alæ anticæ fascia media obliqua lineari integra lutea.*

Deep black. Head, thorax, and fore coxæ beneath very hairy. Fore wings with an entire linear straight oblique band which ends

as usual by the tips of the fore wings. Distinguished from the female by the band which is broader and paler, and quite straight. Length of the body 7 lines; of the wings 20 lines.

a. Amazon River. From Mr. Bates' collection.

Group 13. CENTRONIA.

Mas. Corpus cylindricum, sublineare, sat validum, longitudine mediocre. Palpi ascendentes, arcuati, capitis longitudine; articulus 3us minimus, 2i octava parte brevior. Antennæ mediocriter pectinatæ, apice serratæ. Abdomen longi-subfusiforme; latera basim versus fasciculata. Pedes sat graciles; tibiæ anticæ non dentatæ; posticæ calcaribus quatuor abbreviatis. Alæ longiusculæ, sat latæ; anticæ subacuminatæ.

Centronia p., *Hübn. Verz. Schmett.* 122.

Male. Body cylindrical, rather stout, nearly linear, moderately long. Palpi ascending, curved, as long as the head; third joint very minute, less than one-eighth of the length of the second. Antennæ moderately pectinated to four-fifths of the length, serrated from thence to the tips. Abdomen elongate-subfusiform, with a tuft of hairs on each side near the base, extending for one-fourth of its length beyond the hind wings. Legs rather slender; fore tibiæ not dentated; hind tibiæ with four short spurs. Wings rather long, moderately broad; fore wings more pointed than in the other groups of this genus.

41. Josia Melanitis.

Atra; palpi pedesque subtus albo vittati; abdomen subtus vittis quatuor maculariibus albis; alæ subtus basi cyanescentes, anticæ fascia lata subobliqua lutea, apice albo ciliatæ; abdominis latera basim versus albo maculata et ciliata.

Zygæna Erynnis? *Fabr. Sp. Ins.* ii. 164, 38; *Mant. Ins.* ii. 106, 46; *Ent. Syst.* iii. 1, 400, 48.

Sphinx Zygæna Erynnis, *Gmel. ed. Syst. Nat.* i. 5, 2397, 141.

Surinam.

Centronia rejecta? (Sphinx papilionoides, Glaucopis ampla), *Geyer, Samml. Exot. Schmett.* 18, 332, f. 663, 664.

Centronia Melanitis, *Hübn. Verz. Schmett.* 122, 1326; *Samml. Exot. Schmett.* 19, 47, f. 93, 94.

Deep black. Palpi and legs striped with white beneath. Abdomen with a white spot and a tuft of long white hairs on each side towards the base; under side with four rows of white spots. Wings bluish towards the base. Fore wings with a broad entire nearly linear hardly curved luteous band beyond the middle. Length of the body 8 lines; if the 22—23 lines.

a. Demerara. Presented by J. S. Bowerbank, Esq.
b. ———? Presented by J. G. Children, Esq.

Group 14. PHAVARÆA.

Mas. Corpus longum, cylindricum, sat gracile. Palpi capite paullo breviores; articulus 3us linearis, 2i quarta parte non longior. Antennæ usque ad bistrientem pectinatæ. Abdomen longi-oblanceolatum, alas posticas quadrario superans. Pedes sat graciles; tibiæ anticæ non dentatæ, posticæ calcaribus quatuor sat longis. Alæ latæ, longitudine mediocri; posticarum margo interior apice dilatatus.

Male. Body long, cylindrical, rather slender. Palpi a little shorter than the head; third joint linear, about one-fourth of the length of the second. Antennæ pectinated to two-thirds of the length. Abdomen elongate-oblanceolate, extending for one-fourth of its length beyond the hind wings. Legs rather slender; fore tibiæ not dentated; hind tibiæ with four rather long spurs. Wings broad, moderately long. Hind wings dilated at the end of the inner border.

42. Josia Erynnis?

Nigra; alæ anticæ fascia subobliqua lutea.

Centronia Erynnis? (Sphinx papilionoides, Glaucopis ampla) *Geyer, Samml. Exot. Schmett.* 18, 332, f. 663, 664.

Black. Fore wings with a slightly oblique luteous band, whose sides are slightly undulating; it is rather broader behind than in front, and it approaches close to the fore border, and extends near to the hind border by the tips of the hind wings. Length of the body 8 lines; of the wings 18 lines.

a. Brazil. From Mr. Argent's collection.
b. Brazil. From Mr. Milne's collection.

Note.—According to Geyer, *J. Erynnis* inhabits Java.

Group 15. SCEDROS.

Corpus cylindricum, lineare, sat longum, validiusculum. Palpi porrecti, capitis longitudine; articulus 3us conicus, 2i sexta parte æqualis. Antennæ usque ad bistrientem sat late pectinatæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ anticæ non dentatæ, posticæ calcaribus quatuor longiusculis. Alæ non longæ; anticæ sat latæ, posticæ latissimæ.

Male. Body cylindrical, linear, rather long, moderately stout. Palpi porrect, as long as the head; third joint conical, about one-sixth of the length of the second. Antennæ rather deeply pectinated to full two-thirds of the length. Abdomen not extending beyond the hind wings. Legs rather slender; fore tibiæ not dentated; hind tibiæ with four rather long spurs. Wings not long; fore wings rather broad; hind wings very broad.

43. Josia dilatata.

Fusco-nigra; alæ anticæ fascia obliqua lutea; mar. *abdominis latera apicem versus fasciculata.*

Male. Brownish black. Abdomen with a tuft of black hairs on each side towards its tip. Fore wings with an oblique entire linear luteous band which is slightly inclined inward by the hind border. Hind wings very broad, parallel to the abdomen, and extending a little beyond its tip, and forming a groove on each side for its reception. Length of the body 9 lines; of the wings 22 lines.

a. Brazil. From Mr. Bates' collection.

Group 16. THYRGIS.

Corpus cylindricum, sublineare, sat longum et gracile. Palpi capite paullo longiores; articulus 3us linearis, 2i dimidio longior. Antennæ subserratæ. Abdomen apice obconicum, alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor abbreviatis. Alæ latæ, longitudine mediocri.

Epidesma, p., *Hübn. Verz. Schmett.* 176.
Ephialtias, p., *Hübn. Samml. Exot. Schmett.*

Fem. Body cylindrical, nearly linear, moderately long and slender. Palpi a little longer than the head; third joint linear, more than half the length of the second. Antennæ minutely serrated.

Abdomen obconical towards the tip, not extending beyond the hind wings. Legs slender; hind tibiæ with four short spurs. Wings broad, moderately long.

44. Josia Militta.

Var.? *Nigra; caput albo guttatum; prothorax rufo bimaculatus; thorax antice luteo guttatus; pedes subtus albo vittati; coxæ anticæ subtus luteæ; alæ albo plerumque ciliatæ, anticæ fascia media subobliqua subarcuata postice attenuata lutea.*

Phalæna Militta, *Cram. Pap. Exot.* iv. 59, pl. 370, f. 1.
Epidesma Militta, *Hübn. Verz. Schmett.* 177, 1823.

Surinam.

Var.? Black. Head with white dots. Prothorax with a red spot on each side. Thorax with two luteous dots on each side. Legs striped with white beneath. Fore coxæ luteous beneath. Wings mostly fringed with white. Fore wings with an oblique slightly curved luteous band which extends very near to the borders, is attenuated hindward, and ends by the tips of the hind wings. Length of the body 6 lines; of the wings 18 lines.

a. Ega, Brazil. From Mr. Bates' collection.

45. Josia Tribuna.

Lutea; caput, thoracis discus abdominisque vitta dorsalis nigra; alæ nigræ; anticæ vitta basali fasciaque obliqua pone medium luteis; posticæ vitta lata antica lutea.

Ephialtias Tribuna, *Hübn. Samml. Exot. Schmett.* 24, 246, f. 491, 492.

Cuba.

46. Josia contracta.

Nigra; oculi albo cincti; caput et prothorax subtus lutea; thorax maculis quatuor anticis luteis; pedes subtus albo vittati; coxæ anticæ subtus luteæ; alæ anticæ fascia media vix obliqua postice valde attenuata lutea; posticæ luteo marginatæ.

Black. Head white about the eyes, luteous beneath. Thorax with four luteous spots in front, luteous beneath. Legs striped with white beneath. Fore coxæ luteous beneath. Fore wings with a nearly upright hardly curved luteous band which is fusiform for two-thirds of its length, and much attenuated from thence to its end

which is by the tips of the hind wings; these have a luteous hind border. Length of the body 6 lines; of the wings 18 lines.

a. South America. From Mr. Warwick's collection.

Genus 6. DIOPTIS.

Corpus cylindricum, gracile, plerumque longum et lineare. Palpi capite non longiores; articulus 3us 2o plus minusve brevior. Antennæ *maris* plerumque pectinatæ, nonnunquam serratæ aut simplices; *fœminæ* nonnunquam pectinatæ, sæpius simplices. Abdomen alarum margines posticos attingens et plerumque superans. Tibiæ posticæ quadricalcaratæ, rarissime bicalcaratæ. Alæ plerumque limpidæ, longæ, angustæ, nonnunquam latæ.

Dioptis, *Hübn. Verz. Schmett.* 174.

Body cylindrical, slender, generally long and linear. Palpi varying in length, not longer than the head; third joint more or less shorter than the second. Antennæ of the male generally pectinated, occasionally serrated or simple; of the female sometimes pectinated, more often simple. Abdomen extending as far as the hind wings, and most often beyond them. Hind tibiæ with four spurs of various length, very rarely with two spurs. Wings mostly limpid, generally long and narrow, broad in some species.

Group 1. EROCHA.

Mas. Corpus cylindricum, sublineare, longiusculum, sat gracile. Palpi pilosi, ascendentes, capite vix breviores; articulus 3us 2i dimidio vix brevior. Antennæ subpectinatæ, corporis dimidio longiores. Abdomen alas posticas quadrario superans. Pedes sat validi; tibiæ anticæ subtus pilosæ, non dentatæ; posticæ calcaribus quatuor longis. Alæ mediocriter longæ, sat angustæ.

Male. Body cylindrical, nearly linear, rather long and slender. Palpi pilose, ascending, nearly as long as the head; third joint nearly half the length of the second. Antennæ more than half the length of the body, minutely pectinated nearly to the tips. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather stout; fore tibiæ pilose beneath, not dentated; hind tibiæ with four long spurs. Wings moderately long, rather narrow.

1. DIOPTIS DISCRETA.

Nigra; thorax ex parte et pectus albo hirta; abdomen cyaneo-nigrum; alæ anticæ striga basali media prasina maculaque discali elliptica alba; posticæ vitta brevi subfusiformi alba nigro venosa.

Black. Proboscis tawny. Thorax partly, pectus, coxæ and fore femora clothed with white hairs. Abdomen bluish black. Fore wings with a large transverse oblique elliptical white spot in the disk beyond the middle. Hind wings with a nearly fusiform discal black-veined white stripe, which extends from the base to a little beyond the middle. Length of the body 7 lines; of the wings 16 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

Group 2. ERBESSA.

Corpus cylindricum, gracile, lineare, sat longum. Palpi ascendentes, arcuati, capitis longitudine; articulus 3us minimus, 2i octava parte non longior. Antennæ simplices, gracillimæ, corporis dimidio multo longiores. Abdomen alas posticas quadrario superans. Pedes graciles; tibiæ anticæ subtus dilatatæ, posticæ calcaribus quatuor longiusculis. Alæ mediocriter longæ latæque.

Body cylindrical, slender, linear, rather long. Palpi ascending, curved, as long as the head; third joint very small, not more than one-eighth of the length of the second. Antennæ simple, very slender, much more than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs slender; fore tibiæ dilated beneath; hind tibiæ with four rather long spurs. Wings moderately broad and long.

2. DIOPTIS SOBRIA.

Nigro-cyanea; corpus albo trivittatum, subtus album; prothorax luteo-hirtus; alæ anticæ macula magna obliqua subovali alba hyalina discali, venis basim versus albicantibus; posticæ macula apicali subtus vittaque discali albis.

Blackish blue. Palpi and legs white beneath. Proboscis black. Thorax and abdomen with three white stripes, white beneath. Prothorax clothed with luteous hairs. Fore wings with a large oblique nearly oval white hyaline spot beyond the middle of the disk, traversed by white veins; veins whitish towards the base. Hind wings with a white hyaline discal stripe on both sides, and

with a white spot at the tip beneath. Length of the body 5 lines; of the wings 14 lines.

Var. β. Stripe of the hind wings very short, forming a fusiform spot in the middle.

a, *b*. Parà. From Mr. Bates' collection.

Group 3. PHELLOE.

Mas. Corpus cylindricum, lineare, gracile, longissimum. Palpi ascendentes, arcuati, capitis longitudine; articulus 3us minimus, 2i octava parte non longior. Antennæ simplices, gracillimæ, corporis dimidio vix longiores. Abdomen alas posticas dimidio superans. Pedes graciles; tibiæ anticæ non dentatæ; posticæ calcaribus quatuor breviusculis. Alæ angustæ.

Male. Body cylindrical, linear, slender, very long. Palpi ascending, curved, as long as the head; third joint very small, not more than one-eighth of the length of the second. Antennæ simple, very slender, hardly more than half the length of the body. Abdomen extending for full half its length beyond the hind wings. Legs slender; fore tibiæ not dentated; hind tibiæ with four rather short spurs. Wings narrow.

3. Dioptis glaucaspis.

Atra, subtus alba; thorax et abdomen albo trivittata; prothorax luteo-hirtus; abdomen cyaneum; alæ anticæ macula rotunda discali albo-hyalina, venis basim versus albis; posticæ cyanescentes, macula apicali subtus vittaque brevi subobliqua discali albo-hyalinis.

Deep black. Head mostly white. Proboscis black. Palpi, legs and abdomen white beneath. Prothorax clothed with luteous hairs. Thorax and abdomen with three white stripes. Abdomen blue. Fore wings tinged with blue towards the base, with a white fringe at the tips, and with a nearly round white hyaline spot in the disk a little beyond the middle, traversed by white veins; veins white, hoary towards the tips. Hind wings tinged with blue, with a white spot at the tips beneath, clothed with white hairs along the inner border, and having a white very slightly oblique discal stripe which extends from the inner border along more than half the length. Length of the body 5½—7 lines; of the wings 12—14 lines.

Var. β. Stripe of the hind wings partly gray.

a—*c*. Parà. From Mr. Bates' collection.

Group 4. ERCHIA.

Corpus cylindricum, sublineare, sat gracile, breviusculum. Palpi capite paullo breviores; articulus 3us parvus, 2i quadrario non longior. Antennæ subpectinatæ: corporis dimidio paullo longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ anticæ subtus non dentatæ; posticæ calcaribus quatuor mediocriter longis. Alæ sat angustæ.

Body cylindrical, nearly linear, rather slender and short. Palpi rather shorter than the head; third joint small, not more than one-fourth of the length of the second. Antennæ minutely pectinated, a little more than half the length of the body. Abdomen not extending beyond the hind wings. Legs slender; fore tibiæ not dentated beneath; hind tibiæ with four spurs of moderate length. Wings rather narrow.

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4. Dioptis semistria.

Nigro-cyanea; caput, prothorax et abdomen apice luteo-hirta; pedes subtus albidi; alæ anticæ nigræ, fascia brevi lata obliqua discali subarcuata alba; posticæ albo fimbriatæ, striga discali alba.

Blackish blue. Head, prothorax and tip of the abdomen clothed with luteous hairs. Proboscis ferruginous. Legs whitish beneath. Fore wings black, with a short broad oblique very slightly curved white band in the disk beyond the middle, with white veins. Hind wings with a white fringe, and with a white fusiform discal streak which is most apparent beneath. Length of the body 4¼ lines; of the wings 16 lines.

a. Brazil. From Mr. Bates' collection.

5. Dioptis Porphyria.

Nigra, cyaneo varia; alæ albo ciliatæ, anticæ apice albo notatæ vittaque pone medium obliqua e maculis duabus albis.

Phalæna Porphyria, *Cram. Pap. Exot.* iv. 227, pl. 397, f. E.

Surinam.

Group 5. PHARA.

Mas. Corpus cylindricum, gracile, lineare, mediocriter longum. Palpi capitis longitudine; articulus 3us conicus, 2i quadrario lon-

gitudine. Antennæ mediocriter pectinatæ, corpore perpaullo breviores. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ anticæ non dentatæ; posticæ calcaribus quatuor sat longis. Alæ longiusculæ, subangustæ; posticæ subangulatæ.

Male. Body cylindrical, linear, slender, moderately long. Palpi full as long as the head; third joint conical, about one-fourth of the length of the second. Antennæ moderately pectinated to the tips, not much shorter than the body. Abdomen extending for one-sixth of its length beyond the hind wings. Legs slender; fore tibiæ not dentated beneath; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Hind wings slightly angular.

6. Dioptis trivittata.

Nigro-cyanea; caput coccineo-hirtum; abdomen albo trivittatum, subtus album; pedes subtus albi; alæ nigræ basi cyaneæ, albo ex parte fimbriatæ; anticæ fascia interrupta obliqua discali; posticæ vittis tribus albis hyalinis.

Bluish black. Head clothed with crimson hairs. Palpi crimson towards the base. Antennæ and proboscis black. Abdomen with three white stripes; under side and legs beneath white. Wings black, blue at the base, partly fringed with white which is most apparent beneath. Fore wings traversed a little beyond the middle with an abbreviated interrupted white band which is divided into two parts, the first quadrate, upright, and near the fore border, the second oblanceolate, oblique, and extending towards the hind border. Hind wings with a white discal stripe which extends along three-fourths of the length from the base, and is mostly white-veined, and with a slight white stripe in front and another behind. Length of the body 5 lines; of the wings 16 lines.

a. ———? From Mr. Children's collection.

Group 6. DRYMŒA.

Mas. Corpus sublineare, sat longum et gracile. Palpi porrecti, capite multo breviores; articulus 3us conicus, 2i quadrario non longior. Antennæ subserratæ, corporis dimidio paullo longiores. Abdomen alas posticas quadrario superans. Pedes graciles; tibiæ anticæ subtus non dentatæ; posticæ calcaribus quatuor sat longis. Alæ sat longæ et angustæ.

Male. Body nearly linear, rather long and slender. Palpi horizontal, much shorter than the head; third joint conical, not more than one-fourth of the length of the second. Antennæ minutely serrated, a little more than half the length of the body. Abdomen slightly compressed? extending for one-fourth of its length beyond the hind wings. Legs slender; fore tibiæ not dentated beneath; hind tibiæ with four moderately long spurs. Wings rather long and narrow.

7. Dioptis hesperoides.

Nigro-cyanea, subtus alba; alæ subtus argenteo strigatæ; anticæ maculis duabus limpidis.

Bluish black. Head white in front. Proboscis white. Antennæ with a broad white band. Palpi beneath and pectus mostly white. Thorax with a white dot in front. Abdomen with a white stripe beneath, and with a short interrupted white stripe on each side. Fore wings with two limpid spots, the first fusiform, towards the base and near the hind border; the second smaller, transverse, beyond the middle and towards the fore border; under side with some silvery streaks towards the tips. Hind wings silvery beneath with black veins. Length of the body 6 lines; of the wings 16 lines.

a. New Grenada. From M. Jurgens' collection.

Group 7. EUAGRA.

Corpus cylindricum, gracile, lineare, sat longum. Palpi ascendentes, capitis longitudine; articulus 3us conicus, minimus, 2i sexta parte non longior. Antennæ *maris* subpectinatæ, *fœminæ* simplices. Abdomen alas posticas plus minusve superans. Pedes graciles; tibiæ anticæ subtus non dentatæ; posticæ mediocriter quadricalcaratæ. Alæ longiusculæ, subangustæ.

Euagra, *MSS.*

Body cylindrical, slender, linear, rather long. Palpi ascending, as long as the head; third joint conical, very small, about one-sixth of the length of the second. Antennæ minutely pectinated to seven-eighths of the length in the male, simple in the female. Abdomen extending from one-fourth to one-half its length beyond the abdomen. Legs slender; fore tibiæ not dentated; hind tibiæ with four moderately long spurs. Wings rather long and narrow.

8. Dioptis cœlestina.

Var.? *Cyanea; caput coccineo-hirtum, antice album; palpi pedesque subtus albi; abdomen albo univittatum; alæ atræ, basim versus cyanescentes, vitta una albo-hyalina nigro univenosa.*

Phalæna cœlestina, *Cram. Pap. Exot.* iv. 107, pl. 345, f. g.

Surinam.

Blue. Head clothed with crimson hairs, white in front. Palpi and legs white beneath. Proboscis ferruginous. Abdomen with a white stripe which is slender above, broad beneath. Wings deep black, bluish towards the base, each with a white hyaline stripe which is intersected by a black vein; stripe in the fore wings discal, straight behind, convex in front, attenuated towards the base, much less than half the length of the wing; stripe of the hind wings nearly linear, proceeding from the base towards the hind border, along three-fourths of the length. Length of the body 5 lines; of the wings 14 lines.

a, *b*. Parà. From Mr. Bates' collection.

9. Dioptis hœmanthus.

Læte cyanea; prothorax subtus et caput coccineo-hirta, hoc antice album; pedes et abdomen subtus alba, hoc apice testaceum; alæ atræ, basim versus cyaneæ; anticæ fascia obliqua abbreviata trigona discali albo-hyalina; posticæ vitta discali angusta albo-hyalina.

Bright blue. Prothorax beneath and head clothed with crimson hairs. Head white in front. Palpi crimson towards the base. Proboscis black. Abdomen and legs white beneath. Abdomen with a tuft of black hairs at the tip; sexual appendages large, testaceous. Wings deep black, blue towards the base. Fore wings with an oblique elongate-triangular white hyaline band in the disk beyond the middle, this band is attenuated towards the hind border and approaches nearer to it than to the fore border, and contains no apparent veins. Hind wings with a narrow white hyaline discal stripe which extends from the base nearly to the hind border and is traversed obliquely by a black vein near its tip. Length of the body 5 lines; of the wings 15 lines.

a. Mexico. From Mr. Argent's collection.

10. Dioptis azurea.

Cyanea; caput album, luteo-hirtum; abdomen vitta dorsali ventreque albis; palpi basi lutei; pedes subtus albi; alæ atræ, basi cyanescentes; anticæ macula obliqua subtrigona discali albo-hyalina, strigaque postica tenui alba; posticæ vitta discali albo-hyalina.

Euagra azurea, *MSS.*

Blue. Head mostly white, clothed on each side and beneath with luteous hairs. Palpi luteous towards the base, white beneath as are also the legs and the abdomen, the latter has a white dorsal stripe. Wings deep black, blue towards the base. Fore wings with an oblique nearly triangular white hyaline spot in the disk beyond the middle, attenuated towards the hind border, but not nearer to it than to the fore border, and containing no apparent veins; a short white streak proceeding from the base along the submedian vein. Hind wings with a discal white hyaline stripe, widening slightly from the base to beyond three-fourths of the length, and traversed obliquely by a black vein. Length of the body 5 lines; of the wings 14 lines.

♂. Brazil. From M. Becker's collection.

11. Dioptis glaucopoides.

Atra; caput cyaneum; palpi pedesque subtus albi; thorax cyaneo quadrivittatus et antice unifasciatus; abdomen fasciis duabus lateralibus cyaneis unaque dorsali alba, subtus albo bivittatum; alæ anticæ albo terminatæ, basim versus cyaneo bivittatæ, fasciaque abbreviata discali obliqua albo-hyalina; posticæ vitta discali abbreviata limpida nigro venosa.

Deep black. Head blue, white beneath, as are also the palpi and the legs. Proboscis black. Thorax with four blue stripes, and in front with an interrupted blue band. Abdomen with a slender middle white stripe, and two broad lateral blue stripes; under side with two white stripes. Fore wings with white tips, and with two blue stripes proceeding along half the length from the base; an abbreviated oblique white hyaline band in the disk beyond the middle, traversed by distinct and partly by black veins. Hind wings with a limpid discal stripe extending along two-thirds of the length

from the base, and intersected by black veins. Length of the body 5 lines; of the wings 15 lines.

a, *b*. Parà. From Mr. Bates' collection.

12. Dioptis umbrifera.

Nigro-cyanea, subtus alba; prothorax luteo-hirtus; alæ atræ, basim versus cyaneæ; anticæ albo terminatæ maculaque magna obliqua subovali discali albo-hyalina; posticæ vitta discali cinerea subhyalina apice alba maculaque infera apicali alba.

D. glaucopoides, var.?

Blackish blue. Palpi, legs and abdomen white beneath. Proboscis ferruginous. Prothorax clothed with luteous hairs. Wings deep black, tinged with blue towards the base. Fore wings with a white fringe at the tips, and with a large oblique nearly oval hyaline white spot in the disk beyond the middle, traversed by white veins. Hind wings with a white spot beneath at the tips and with a gray slightly hyaline discal stripe which extends along two-thirds of the length and is white towards the tip. Length of the body 4½—6 lines; of the wings 13—16 lines.

a—*d*. Parà. From Mr. Bates' collection.
e. South America. From Mr. Warwick's collection.

Group 8. AGYRTA.

Corpus cylindricum, lineare, gracile, sat longum. Palpi ascendentes, capite vix breviores; articulus 3us minimus, *maris* conicus, *fœminæ* obtusus. Antennæ *maris* mediocriter pectinatæ, *fœminæ* subpectinatæ. Abdomen alas posticas plus minusve superans, *fœminæ* apice obconicum. Pedes graciles; tibiæ anticæ subtus paullo incrassatæ et excavatæ; posticæ calcaribus quatuor minutis. Alæ longæ, mediocriter latæ; anticæ venis inferioribus quatuor.

Agyrta, *Hübn. Verz. Schmett.* 177.

Body linear, slender, cylindrical, rather long. Palpi ascending, nearly as long as the head; third joint very small, not more than one-eighth of the length of the second, conical in the male, obtuse in the female. Antennæ moderately pectinated in the male, minutely pectinated in the female. Abdomen extending from one-sixth to one-half of its length beyond the hind wings, obconical at the tip in

the female. Legs slender; fore tibiæ slightly thickened and excavated beneath; hind tibiæ with four minute spurs. Wings long, moderately broad; fore wings with four inferior veins.

12. Dioptis dux.

Cyanea; caput albo varium, subtus coccineo-hirtum; palpi, abdomen et pedes subtus alba; thorax et abdomen albo trivittata; alæ atræ, basim versus cyaneæ; anticæ vitta angulata fasciaque obliqua, posticæ vitta discali basi furcata limpidis nigro venosis.

Blue. Head white about the eyes and with two white dots behind, clothed beneath with crimson hairs. Palpi, abdomen and legs white beneath. Proboscis tawny. Thorax and abdomen with three white stripes. Wings deep black, blue towards the base, with limpid black-veined spaces. Fore wings with a discal stripe which extends from near the base to beyond the middle, its fore side forms an obtuse angle, and its hind side is very slightly concave; beyond it there is an oblique abbreviated discal band; second inferior vein nearer to the first than to the third; third four times more remote from the fourth than from the first. Hind wings with a nearly linear discal stripe which extends to three-fourths of the length, and at its base emits a slender fork along the inner border. Length of the body 6½—7 lines; of the wings 20—22 lines.

a. Venezuela. From Mr. Dyson's collection.
b. Honduras. From Mr. Dyson's collection.
c. ——— ?

13. Dioptis Auxo.

Cyanea; caput coccineo-hirtum, antice album; palpi pedesque subtus albi; abdomen vittis tribus ventreque albis; alæ atræ, basim versus cyaneæ, vittis quatuor discalibus limpidis nigro venosis.

Hipocrita tineiformis Auxo, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Veræ* vi. *Hipocritæ A. Tineiformes*, c. f. 1—4.
Agyrta Auxo, *Hübn. Verz. Schmett.* 177, 1829.
Sphinx Zygæna Auxo? *Gmel. ed. Syst. Nat.* i. 5, 2390, 33.
China.

Blue. Head clothed with crimson hairs, white in front. Palpi and legs white beneath, the former crimson towards the base.

Proboscis black. Thorax with a white spot on each shoulder, and sometimes with a short white dorsal stripe. Abdomen tumid on each side at the base, with three white stripes; under side also white. Wings deep black, tinged with blue towards the base. Fore wings with a white streak in front proceeding from the base, their limpid discal stripe widening from the base to beyond two-thirds of the length, and intersected by black veins; the stripe in the hind wings tapers from the base to three-fourths of the length, and also contains black veins. Length of the body 4½—5 lines; of the wings 15—16 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.

14. Dioptis interclusa.

Cyanea; caput coccineo-hirtum; antice album; palpi pedesque subtus albi; abdomen vittis tribus ventreque albis; alæ atræ, apice albo fimbriatæ, anticæ fasciis duabus obliqius, posticæ vitta discali, limpidis.

Blue. Head clothed with crimson hairs, white in front. Palpi and legs white beneath. Proboscis black. Thorax and abdomen with three white stripes, the latter white beneath. Wings black. Fore wings with two oblique limpid bands, not extending to the borders, the first lanceolate, attenuated towards the hind border, traversed by a black vein; the second nearly elliptical, a little less oblique and much smaller than the first, with white veins. Hind wings with a discal limpid stripe which extends along full three-fourths of the length from the base, and is traversed by two black veins. Length of the body 4 lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.

15. Dioptis diminuta.

Læte cyanea; caput antice album; pedes et abdomen subtus albida; alæ nigræ, basi cyaneæ; anticæ vitta clavata basali fasciaque obliqua discali, posticæ vitta, limpidis nigro venosis.

Bright blue. Head white in front. Palpi and proboscis black. Abdomen and legs whitish beneath. Wings black, blue towards the base. Fore wings with two limpid black-veined marks, the first a clavate stripe widening from near the base to one-third of the length; the second an oblique abbreviated band in the disk. Hind

wings with a discal limpid black-veined stripe widening from the base to two-thirds of the length. Length of the body 4 lines; of the wings 12 lines.

a. Parà. From Mr. Bates' collection.

16. Dioptis Micilia.

Cyanea; caput coccineo-hirtum, antice album; palpi pedesque subtus albi; abdomen vittis tribus ventreque albis; alæ atræ basim versus cyanescentes; anticæ vitta obliqua, posticæ vitta discali limpidis.

Phalæna Micilia, *Cram. Pap. Exot.* iii. 62, pl. 228, f. G.
Limacodes Micilia, *Duncan, Naturalist's Library*, xxxvii. *Exotic Moths*, 179, pl. 22, f. 1, 2.

Surinam.

Blue. Head clothed with crimson hairs, white in front, and with a white dot on the vertex. Palpi and legs white beneath, the former crimson towards the base. Proboscis ferruginous. Thorax with three slight white streaks in front, and one on each side beneath. Abdomen with white stripes; under side also white. Wings black, blue towards the base. Fore wings with a subfusiform limpid stripe not extending to the borders, oblique beyond the middle, intersected by black veins. Hind wings limpid with black veins and with broad black borders; inner border with a limpid streak. Length of the body 5½ lines; of the wings 18 lines.

a. Venezuela. From Mr. Dyson's collection.

17. Dioptis divisa.

Cyanea; caput albo varium, subtus coccineo-hirtum; palpi basi coccinei; thorax maculis duabus anticis albis; abdomen et pedes subtus alba, illum vitta una nigra duabusque albis; alæ atræ, basi cyaneo vittatæ; anticæ maculis tribus discalibus, posticæ vitta discali, limpidis nigro venosis.

Fem. Blue. Head white about the eyes and with two white dots behind, clothed beneath with crimson hairs. Proboscis piceous. Palpi crimson at the base. Thorax with a white spot on each shoulder. Abdomen with a black dorsal stripe and a slender white stripe on each side; base with a nearly triangular white-bordered lappet on each side; under side white. Legs white beneath; fore

coxæ with crimson hairs at the base. Wings deep black, with blue stripes towards the base. Fore wings with three limpid black-veined spaces; the first a short slightly oblique stripe near the base; the second an oblique discal abbreviated band, a little beyond the middle, widened hindward; the third a short subapical oblique streak. Hind wings with a discal elongate-subfusiform limpid black-veined stripe extending from the base to beyond three-fourths of the length. Length of the body 6—6½ lines; of the wings 16—18 lines.

a, *b*. Parà. From Mr. Bates' collection.
c, *d*. South America. From Mr. Warwick's collection.

18. Dioptis Pyrrhorhœa.

Cyanea; caput albo varium; palpi et pedes subtus albi; thorax albo bivittatus; abdomen albo trivittatum, subtus album, apice coccineum; alæ limpidæ nigro venosæ nigroque marginatæ; anticæ fascia obliqua et quadrario apicali nigris.

Hyelosia Pyrrhorhœa, *Hübn. Samml. Exot. Schmett.* 12, 22, f. 43, 44.

a Parà. Presented by J. P. G. Smith, Esq.
b. South America. From Mr. Warwick's collection.
c. Parà. From Mr. Bates' collection.

Group 9. GNOPHÆLA.

Mas. Corpus cylindricum, sublineare, breviusculum, sat gracile. Caput et thorax pilosa. Palpi porrecti, pilosi, capite breviores; articulus 3us acuminatus, 2i quadrario non longior. Antennæ mediocriter pectinatæ. Abdomen alas posticas perpaullo transiens. Pedes sat graciles; tibiæ anticæ subtus excavatæ; posticæ calcaribus quatuor breviusculis. Alæ longæ, mediocriter latæ.

Gnophæla, *MSS.*

Body cylindrical, nearly linear, rather short and slender. Head and thorax hairy. Palpi porrect, hairy, shorter than the head; third joint pointed, about one-fourth of the length of the second. Antennæ moderately pectinated nearly to the tips. Abdomen extending for nearly one-sixth of its length beyond the hind wings. Legs rather slender; fore tibiæ excavated but not dentated beneath; hind tibiæ with four rather short spurs. Wings long, of moderate breadth.

19. Dioptis æquinoctialis.

Nigro-cyanea, nigro-hirta; prothorax utrinque subtusque luteo-hirtus; thorax albo bistrigatus; pedes antici subtus albi, coxis luteo-hirtis; alæ nigræ, discis plerumque limpidis nigro unifasciatis, anticæ gutta basali alba.

Gnophæla æquinoctialis, *MSS.*

Blackish blue, clothed with black hairs. Prothorax clothed on each side and beneath with luteous hairs. Thorax with a slight white streak on each side. Fore legs mostly white beneath; fore coxæ clothed with luteous hairs. Wings black. Fore wings with a white dot on each at the base, and with two limpid upright broad black-veined bands; the first united to a limpid stripe which widens from near the base and is parallel to the hind border and nearer to it than to the fore border; the second near the tip. Hind wings with two large limpid black-veined spots, the first in two divisions, of which the fore one is partly beyond the hind one; the second transverse, and forming a short band. Length of the body 5 lines; of the wings 16 lines.

a. South America. From M. Becker's collection.

Group 10. HYRMINA.

Corpus cylindricum, lineare, gracillimum, longiusculum. Palpi ascendentes, arcuati, capite breviores; articulus 3us acuminatus, 2i quadrario brevior. Antennæ *maris* sat late pectinatæ, *fœminæ* subpectinatæ. Abdomen *maris* alas posticas paullo superans, *fœminæ* brevius. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ longitudine mediocres, sat latæ; anticæ venis tribus inferioribus.

Body cylindrical, linear, very slender, rather long. Palpi ascending, curved, shorter than the head; third joint pointed, not one-fourth of the length of the second. Antennæ of the male rather deeply, of the female minutely, pectinated. Abdomen extending a little beyond the hind wings in the male, and nearly as far as them in the female. Legs slender; fore tibiæ of the male slightly channelled and not dentated beneath; hind tibiæ with four small spurs. Wings moderately long, rather broad; fore wings with three inferior veins.

20. Dioptis areolata.

Nigra ; caput antice album ; palpi et pedes subtus albi ; prothoracis latera luteo-hirta ; thoracis latera albo varia ; abdomen albo trivittatum, subtus album ; alæ sublimpidæ, nigro venosæ et marginatæ, anticæ nigro bifasciatæ.

Black, slender, linear. Head white in front. Palpi and legs white beneath. Prothorax with luteous hairs on each side. Sides of the thorax varied with white. Abdomen with three white stripes; under side white. Wings nearly limpid, with black veins and borders. Fore wings with two slightly oblique black bands, the first in the middle, the second broader and shorter, and near the tip. Length of the body 6—7 lines; of the wings 14—17 lines.

a—c. Brazil. From Mr. Argent's collection.
d. Brazil. Presented by Gordon Graham, Esq.
e. South America. From Mr. Milne's collection.
f. Rio Janeiro. From Mr. Stevens' collection.
g, h. ———? From Mr. Children's collection.

21. Dioptis Cyma.

Nigra, albo vittata, subtus albida ; humeri lutei; alæ sublimpidæ, nigro marginatæ ; anticæ nigro bifasciatæ, macula antica subapicali lutea ; posticæ vitta postica nigro marginata.

Dioptis Cyma, *Hübn. Samml. Exot. Schmett.* 99, f. 17, 18; *Verz. Schmett.* 174, 1792.

a. Parà. Presented by J. P. G. Smith, Esq.
b, c. Parà. From Mr. Bates' collection.
d. Demerara. From Mr. Children's collection.

22. Dioptis vinosa.

Alæ cinereo-diaphanæ ; anticæ marginibus anticis et posticis rufo-fulvis, macula magna externa (in medio alba margine nigro) ; posticæ fœm. fascia submarginali rufo-fulva. Long. alar. fere 24 lin.

——— ———? *Drury, Ins.* i. 47, pl. 23, f. 4.
Sphinx vinosa, *Drury, App.* ii.

Callimorpha? vinosa, *Westw. ed. Drury*, i. 43, pl. 23, f. 4.

Antigua.

a. Jamaica. From Mr. Gosse's collection.
b, *c*. ——— ? Presented by E. Doubleday, Esq.
d. ——— ? Presented by the Entomological Club.
e. ——— ? From Mr. Children's collection.

Group 11. LAURON.

Corpus cylindricum, lineare, gracile, sat longum. Palpi recti, porrecti, capitis longitudine; articulus 3us acuminatus, 2i trientis vix brevior. Antennæ dense pectinatæ, ramis *maris* mediocribus, *fœminæ* brevissimis. Abdomen alas posticas non vix superans. Pedes gracillimi; tibiæ anticæ non dentatæ, posticæ calcaribus duabus apicalibus minimis. Alæ longæ, latiusculæ, plus minusve hyalinæ, venis inferioribus tribus.

Body cylindrical, linear, slender, rather long. Palpi straight, porrect, as long as the head; third joint acuminated, nearly one-third of the length of the second. Antennæ closely pectinated; branches of moderate length in the male, very short in the female. Abdomen extending a little beyond the hind wings in both sexes, or not extending beyond them in the females of some species. Legs very slender; fore tibiæ not dentated; hind tibiæ with two very minute apical spurs. Wings long, rather broad, more or less hyaline; three inferior veins.

23. Dioptis Rica.

Nigra; palpi pedesque subtus albi; abdomen subtus album vitta nigra; humeri lutei; alæ cinereo-subhyalinæ, lùteo ex parte nigroque marginatæ; anticæ dimidio fere apicali nigro fascia obliqua alba albo venosa.

Dioptis Rica, *Hübn. Samml. Exot. Schmett.* 31, 266, f. 531, 532.

Var. β. White band narrow, especially towards the hind border.

a. Venezuela. From Mr. Dyson's collection.
b. Honduras. From Mr. Dyson's collection.
c. South America. From M. Bourcier's collection.

24. Dioptis Syma.

Nigra; palpi, abdomen et pedes subtus albida; pectoris latera luteo-hirta; alæ cinereo-hyalinæ, nigro marginatæ, venis nigro limbatis; anticæ fascia obliqua fusiformi anteapicali albo-hyalina alboque venosa.

Black. Palpi, abdomen and legs whitish beneath. Sides of the pectus clothed with luteous hairs. Wings grayish hyaline with black borders; veins bordered with black. Fore wings black for more than one-third of the length from the tips, near which there is an oblique abbreviated fusiform white band with white veins. Length of the body 6 lines; of the wings 18 lines.

a. ——— ?

25. Dioptis leucophæa.

Nigra, subtus alba; caput et thorax albo guttata; humeri lutei; alæ nigro marginatæ, anticæ luteo ex parte marginatæ, apices versus nigræ, fascia obliqua alba albo venosa. Mas. *Alæ albo-hyalinæ.* Fœm. *Alæ subcinereo-hyalinæ, fascia alba postice vena nigra divisa.*

Black. Palpi, legs and abdomen white beneath, the latter with a black stripe. Thorax with a luteous spot on each side by the fore wings. Wings with black borders. Fore wings with an interrupted luteous border before and behind, black towards the tips, near which there is a short oblique white band with white veins. *Male.* Wings white-hyaline. *Fem.* Wings grayish hyaline, the white band divided hindward by a black vein. Length of the body 4½—5 lines; of the wings 13—16 lines.

a—c. Venezuela. From Mr. Dyson's collection.
d. Parà. Presented by Gordon Graham, Esq.

26. Dioptis Meon.

Testacea; alæ anticæ fuscæ, striga antica, postica et intermedia obliqua fasciuque brevi arcuata subapicali albis; posticæ albo-hyalinæ marginibus latissimis fuscis vitta flava intersectis.

Phalæna Meon, *Cram. Pap. Exot.* i. 113, pl. 71, f. F.

Berbice. Surinam.

27. Dioptis partita.

Nigra; caput et thorax albo guttata; palpi pedesque subtus albi; pectoris latera lutea; abdomen subtus testaceum, vitta nigra; alæ lacteo-limpidæ, iridescentes, nigro marginatæ; anticæ luteo ex parte marginatæ, apicibus late nigris fasciam obliquam albam nigro venosam amplectentibus; posticæ vitta lata postica lutea.

Black. Head and thorax in front with white dots. Palpi and legs white beneath. Pectus luteous on each side. Abdomen testaceous beneath, with a black middle stripe. Wings hyaline, with a slightly opaline hue, with black borders. Fore wings partly bordered with luteous, which by the hind angle forms a short stripe like that of the hind wings; apical third part black including an oblique white band which is divided by black veins. Hind wings with a broad luteous hind border. Length of the body 5½ lines; of the wings 17 lines.

a. Parà. From Mr. Bates' collection.

28. Dioptis Ergolis.

Niger; thorax et alarum anticarum costa apud dimidium basale et fascia brevia obliqua rufa; alæ anticæ disco basali subhyalino, fascia abbreviata obliqua subapicali alba.

a. Jamaica. From Mr. Gosse's collection.
b—d. Jamaica. From Mr. Milne's collection.

Group 12. LOCHA.

Fœm. Corpus cylindricum, lineare, gracillimum, longitudine mediocri. Palpi ascendentes, subarcuati, capite breviores; articulus 3us conicus, minimus, 2i quadrario non longior. Antennæ gracillimæ, vix pectinatæ. Pedes gracillimi; tibiæ posticæ calcaribus quatuor parvis. Alæ hyalinæ, latæ, non longæ, venis inferioribus tribus; posticæ abdomen facile superantes.

Fem. Body cylindrical, linear, very slender, moderately long. Palpi ascending, slightly curved, shorter than the head; third joint conical, very small, not more than one-fourth of the length of the second. Antennæ more slender, and much more minutely pectinated than in the preceding group. Abdomen not extending near so far as the hind wings. Legs very slender; hind tibiæ with four small spurs. Wings hyaline, broad, not long; discal areolet with three inferior veins in each wing.

29. Dioptis hyalina.

Nigra; corpus cinereo-tomentosum, subtus albidum; palpi basi et proboscis testacea; pedes albidi; alæ hyalinæ, nigro venosæ et marginatæ et subfasciatæ.

Black. Body with gray tomentum, whitish beneath. Palpi towards the base and proboscis testaceous. Legs whitish. Wings hyaline with black veins and black borders, and a slight blackish band across each at the tip of the discal areolet. Length of the body 5½ lines; of the wings 16 lines.

a. South America. From Mr. Johnson's collection.

30. Dioptis diaphana.

Alæ diaphanæ, marginibus et externis strigaque transversa e margine antico ad angulum posticum ducta, nigris.

Phalæna (Noctua) diaphana, *Drury*, *App.* iii. *Ill. Exot. Ins.* iii. 30, pl. 22, f. 4.

Callimorpha? diaphana, *Westw. ed. Drury*, iii. 31, pl. 22, f. 4.

Fore wings more elongated and acuminated than those of *D. hyalina.*

Brazil.

Group 13. NEPE.

Mas. Corpus cylindricum, gracile, lineare, non longum. Palpi ascendentes, recti, capite paullo breviores; articulus 3us conicus, minimus, 2i sexta parte non longior. Antennæ subpectinatæ. Abdomen alas posticas non superans. Pedes gracillimi; tibiæ anticæ subtus non dentatæ; posticæ calcaribus quatuor minutis. Alæ longæ, angustæ, discis hyalinis, venis inferioribus tribus.

Male. Body cylindrical, slender, linear, not long. Palpi ascending, straight, a little shorter than the head; third joint conical, very small, about one-sixth of the length of the second. Antennæ very minutely pectinated. Abdomen extending as far as the hind wings. Legs very slender; fore tibiæ not dentated beneath; hind tibiæ with four minute spurs. Wings long and narrow; their disks hyaline; three inferior veins.

31. Dioptis fenestra.

Cyanea; caput albo varium, subtus coccineo-hirtum; palpi et pedes subtus albi; alæ limpidæ nigro venosæ et marginatæ, anticæ quadrario apicali nigro.

Blue. Head white about the eyes, clothed beneath with crimson hairs. Palpi and legs white beneath? brown when denuded. Abdomen with a lappet on each side at the base. Wings limpid with black veins and with broad black borders which have a blue tinge towards the base. Fore wings black towards the tips, and with the black border slightly enlarged in front and behind as if for the commencement of a band. Length of the body 4½ lines; of the wings 16 lines.

a. ———? From Mr. Children's collection.

Group ———?

32. Dioptis Perdica.

Alæ limpidæ, fusco marginatæ, anticæ fusco bifasciatæ, posticæ unofasciatæ.

Phalæna Perdica, *Cram. Pap. Exot.* ii. 126, pl. 178, f. E. *Seba, Ins.* iv. pl. 8, f. 5, 6.

Hind border of the hind wings enlarged.

Bengal.

Genus 7. ESTHEMA.

Fœm. Corpus cylindricum, lineare, longiusculum, sat gracile. Palpi ascendentes, subarcuati, capitis longitudine; articulus 3us conicus, minimus. Antennæ graciles, corporis dimidio paullo breviores, subsetosæ. Abdomen alas posticas vix superans. Pedes graciles; tibiæ anticæ subtus subdentatæ, posticæ calcaribus quatuor parvis. Alæ longæ, latæque, ex parte hyalinæ, venis quatuor inferioribus.

Esthema, *Hübn. Verz. Schmett.* 178.
Cyclosia, p., *Hübn. Verz. Schmett.* 177.

Fem. Body cylindrical, linear, rather long and slender. Palpi vertical, slightly curved, as long as the head; third joint conical, about one-sixth of the length of the second. Antennæ slender,

rather less than half the length of the body, beset on each side with short bristles. Abdomen hardly extending beyond the hind wings. Legs slender; fore tibiæ with a minute tooth beneath; hind tibiæ with four small spurs. Wings long and broad, partly hyaline; four inferior veins; fourth more remote from the third than the third is from the first.

1. Esthema dichroa.

Nigra; caput et thorax albo guttata; abdomen cyaneum; alæ latæ; anticæ fasciis duabus discalibus macularibus obliquis albis, apud baseos cyaneæ nigro strigatæ; posticæ cyaneæ nigro strigatæ, maculisque apud marginem nigrum albis.

Hipocrita superba Dichroa, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Netrices* iii. *Hipocritæ D. Superbæ* a, f. 1—4.
Esthema dichroa, *Hübn. Verz. Schmett.* 178.

a. Parà. From Mr. Bates' collection.

2. Esthema bicolora.

Nigro-cyanea; caput et thorax albo guttata; alæ anticæ fascia media maculari et subapicali integra albis, apud baseos cyaneæ nigro strigatæ; posticæ strigis basalibus cyaneis et marginalibus albis.

Phalæna bicolora, *Sulz. Ins.* 161. pl. 22, f. 6. *Cram. Pap. Exot.* ii. 74, pl. 143, f. A.

Surinam.

a. Brazil. From Mr. Stevens' collection.
b.
c, Parà. From Mr. Bates' collection.
d. ——— ? From Mr. Milne's collection.

3. Esthema Aletta.

Cyanea; alæ nigræ, strigis submarginalibus albo-hyalinis.

Phalæna Aletta, *Cram. Pap. Exot.* iv. 221, pl. 396. f. C.
Cyclosia Aletta, *Hübn. Verz. Schmett.* 177, 1832.

Surinam.

Genus 8. HELEONA.

Heleona, *Swainson, Zool. Illustr. 2nd Ser.* pl. 116; *Westw.*
Phalæna (Noctua), p., *Drury; Cramer.*
Phalæna, p., *Fabr.; Gmel.*
Gynantocera, p., *Guérin.*
Hazis, p., *Boisd.*

1. HELEONA FENESTRATA.

Aurantiaca; alæ hyalinæ, strigis transversis undatis irregularibus marginibusque cyaneis; posticæ fascia maculari marginali aurantiaca.

Heleona fenestrata, *Swainson, Zool. Illustr. 2nd Ser.* pl. 116.
New Holland.

Genus 9. HYALURGA.

Corpus cylindricum, sublineare, sat validum, longitudine mediocri. Palpi validi, ascendentes, capitis longitudine; articulus 3us 2o triplo (*mas*) aut duplo (*fœm.*) brevior. Antennæ maris pectinatæ, fœminæ subpectinatæ. Abdomen fœminæ alas posticas dimidio superans, maris brevior. Pedes sat validi; tibiæ anticæ maris dentatæ, *fœminæ* subdentatæ; posticæ dentibus duabus minimis apicalibus. Alæ longæ, hyalinæ, sat latæ, venis inferioribus quatuor.

Hyalurga, *Hübn. Verz. Schmett.* 174.

Body cylindrical, nearly linear, rather stout, moderately long. Palpi stout, ascending, as long as the head; third joint one-third of the length of the second in the male, half its length in the female. Antennæ densely pectinated, a little more than half the length of the body in the male, shorter in the female; branches moderately long in the male, very short in the female. Abdomen extending beyond the hind wings for one-fourth of its length in the male and for half its length in the female. Legs moderately stout; fore tibiæ with a long stout tooth in the male and with a slight tooth in the female; hind tibiæ with two very minute apical teeth. Wings long, hyaline, moderately broad; four inferior veins; first and second almost close at the base; third more than twice nearer to the second than to the fourth.

1. HYALURGA FENESTRA.

Nigra, subtus alba ; caput et thorax albo maculata ; thoracis latera tegulis obliquis luteis ; abdomen supra luteum, vittis quinque nigris duabusque albis ; alæ limpidæ, anticæ margine fascia apicem versus luteis nigro cinctis, vittaque brevi postica cinereæ ; posticæ vittis duabus posticis cinereis.

Phalæna Bombyx fenestra? *Linn. Mus. Lud. Ulr.* 372. *Clerck, Icon.* pl. 55, f. 1. *Fabr. Sp. Ins.* ii. 170, 18; *Mant. Ins.* ii. 109, 20. *Gmel. ed. Syst. Nat.* i. 5, 2407, 9.
Hyalurga fenestrigera, *Hübn. Verz. Schmett.* 174, 1795.
Sphinx adscita Egeon, *Cram. Pap. Exot.* i. 91, pl. 59, f. B.
Surinam.

a—d. Venezuela. From Mr. Dyson's collection.

Genus 10. HYELOSIA.

Corpus cylindricum, fere lineare, longiusculum, sat gracile. Palpi ascendentes, capite vix breviores; articulus 3us minimus, conicus. Antennæ *maris* late pectinatæ corporis dimidio multo longiores, *fœminæ* subpectinatæ breviores. Abdomen alas posticas paullo superans, *maris* basi compressum, *fœminæ* longi-subfusiforme. Pedes sat validi ; tibiæ anticæ subdilatatæ, *fœminæ* calcaribus duobus minutis apicalibus. Alæ longæ, sat angustæ; anticæ venis quatuor inferioribus.

Anthomyza, p., *Swainson, Zool. Illustr. 2nd Ser.* pl. 124.
Hyelosia, p., *Hübn. Verz. Schmett.* 174.

Body cylindrical, nearly linear, rather long and slender. Palpi ascending, nearly as long as the head ; third joint very small, conical, not more than one-sixth of the length of the second. Antennæ deeply pectinated and much more than half the length of the body in the male, minutely pectinated and much shorter in the female. Abdomen of the male compressed towards the base, extending for one-fourth of its length beyond the hind wings; that of the female elongate-subfusiform, hardly passing the hind wings. Legs moderately stout; fore tibiæ slightly dilated ; hind tibiæ with two minute apical spurs. Wings long, rather narrow; fore wings with four inferior veins.

1. HYELOSIA TIRESIA.

Nigra; caput et thorax albo guttata; abdomen albo univittatum, subtus albo trivittatum; alæ flavido-hyalinæ, nigro marginatæ; anticæ fascia obliqua nigra.

Phalæna Tiresia, *Cram. Pap. Exot.* iv. 241, pl. 400, f. B. (mas.); i. 133, pl. 85, f. B. (fœm.)
Hyelosia Clio, *Hübn. Verz. Schmett.* 174, 1797.
Anthomyza Tiresia, *Swainson, Zool. Illustr. 2nd Ser.* pl. 124, ff. 1.

Third inferior vein full thrice more remote from the second than the second from the first; fourth twice more remote from the third than the third from the second.

Surinam.

a. Parà. Presented by J. P. G. Smith, Esq.

2. HYELOSIA HELICONIDES.

Corpus nigrum; caput, thorax, alæ marginibus anticæque basi albo guttatæ; alæ anticæ nigræ, vitta una basali postica brevi fasciisque duabus obliquis latis discalibus hyalinis flavescente albis; posticæ hyalinæ flavescente albæ, nigro marginatæ.

Anthomyza heliconides, *Swainson, Zool. Illustr. 2nd. Ser.* pl. 124, f. 2.

Third inferior vein hardly more remote from the second than the second from the first; fourth six times more remote from the third than the third from the fourth.

a. Brazil. From Mr. Argent's collection.
b. Brazil. From Mr. Warwick's collection.

Genus 11. CISTIDIA.

Antennæ pectinatæ, breves. Alæ longæ, angustæ, limpido areolatæ.

Cistidia, p., *Hübn. Verz. Schmett.* 174.
Dysschema, p.? *Hübn. Verz. Schmett.* 175.
Euschema, p.? *Hübn. Verz. Schmett.* 175.

1. CYSTIDIA STRATONICE.

Nigra; caput, thorax anticus et abdominis fasciæ flava; alæ quatuor vitta basali fasciaque obliqua undulosa subapicali albo-hyalinis.

Phalæna Stratonice, *Cram. Pap. Exot.* iv. 234, pl. 398, f. K.
Cystidia Stratonice, *Hübn. Verz. Schmett.* 174, 1800.
Japan.

2. CYSTIDIA? CATILINA.

Nigro-fusca; caput et thorax albo guttata; abdomen fuscum; alæ guttis marginalibus albis; anticæ fasciis duabus 2a maculari viridi-hyalinis; posticæ dimidio fere basali maculaque postica viridi-hyalinis.

Phalæna Catilina, *Cram. Pap. Exot.* i. 126, pl. 79, f. E. F.
Dysschema Catilina, *Hübn. Verz. Schmett.* 175, 1807.
Surinam.

3. CYSTIDIA? PALMYRA.

Lutea; antennæ flavæ; alæ glaucescente hyalinæ, fasciis tribus obliquis interruptis angulatis nigro-cyaneis, anticæ apice nigro-cyaneæ.

Phalæna Bombyx Palmyra, *Stoll, Suppl. Cram. Pap. Exot.* v. 159, pl. 36, f. 1.
Euschema Palmyra, *Hubn. Verz. Schmett.* 175, 1804.
Tranquebar.

Genus 12. DYSPHANIA.

Dysphania, *Hübn. Verz. Schmett.* 175.

1. DYSPHANIA NUMANA.

Mas. *Fulva; caput et thorax anticus flava; antennæ nigræ; abdomen fasciis flavis; alæ anticæ fasciis tribus flavis duabusque cyaneis interruptis vel abbreviatis, maculisque duabus una*

basali altera postica flavis ; posticæ flavescentes, fascia cyanea angulata, marginibus fulvis flavo maculatis. Fœm. *Alæ anticæ nigro-cyaneæ maculis tribus* 1a *basali*, 2a *maxima discali*, 3a *postmedia, fasciaque maculari subapicali flavis subhyalinis ; posticæ flavæ subhyalinæ, marginibus nigris flavo maculatis.*

Phalæna Numana, *Cram. Pap. Exot.* iii. 59, pl. 227, f. A. pl. 228, f. A.
Dysphania Numenia, *Hübn. Verz. Schmett.* 175, 1801.
Amboina.

2. DISPHANIA CYANE.

Fulva ; thorax anticus nigro-cyaneus ; antennæ nigræ ; alæ nigro-cyaneæ ; anticæ maculis basalibus cyaneis majoribusque discalibus albidis cyaneo marginatis ; posticæ apud discum albidæ maculis posticis luteis.

Phalæna Attacus Cyane, *Cram. Pap. Exot.* iii. 137, pl. 267, f. D.
Phalæna Bombyx Cyane, *Fabr. Sp. Ins.* ii. *App.* 506 ; *Mant. Ins.* 116, 82. *Gmel. ed. Syst. Nat.* i. 5, 2417, 513.
Dysphania Cyane, *Hübn. Verz. Schmett.* 175, 1802.
Amboina.

Genus 13. PERICOPIS.

Corpus sublineare, fere cylindricum, sat validum, longitudine mediocri. Caput et thorax maris hirta, hic robustus. Palpi ascendentes, maris pilosi ; articulus 3us maris acuminatus, fœminæ conicus, 2o triplo brevior. Antennæ corporis dimidio vix longiores, maris pectinatæ, fœminæ serratæ aut vix pectinatæ. Abdomen alas posticas paullo superans, maris subcompressum thorace multo angustius, fœminæ obconicum. Pedes sat validi : tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ longæ, sat latæ, plus minusve semihyalinæ, venis quatuor inferioribus.

Pericopis, *Hübn. Verz. Schmett.* 175.
Episteme, *Hübn. Samml. Exot. Schmett.*
Hyelosia, p., *Hübn. Verz. Schmett.* 174.

Body nearly linear and cylindrical, moderately long and stout. Head and thorax of the male hairy, the latter rather thick. Palpi more or less ascending, hairy in the male ; third joint acuminated in the male, conical in the female, about one-third of the length of

the second. Antennæ little or not more than half the length of the body, pectinated moderately or minutely in the male, very slightly or serrated in the female. Abdomen of the male slightly compressed, much narrower than the thorax, extending for one-third of its length beyond the hind wings; of the female obconical at the tip, extending for one-fourth of its length or less beyond the hind wings. Legs moderately stout; hind tibiæ with two minute apical spurs. Wings long, rather broad, more or less semihyaline (quite opaque in the female of *P. leucophæa*); four inferior veins.

1. Pericopis perspicua.

Nigro-fusca; caput et thorax albo guttata; palpi pedesque subtus albidi; abdomen pallide fuscum, subtus flavum; alæ guttis marginalibus albis; anticæ fasciis duabus obliquis, posticæ dimidio basali maculaque discali flavo-hyalinis.

Blackish brown. Head and thorax with many white dots. Palpi and legs whitish beneath. Abdomen pale brown, yellow beneath. Wings with marginal white dots. Fore wings with two white dots at the base, and with two oblique yellow hyaline bands. Hind wings yellow hyaline for half the length from the base and with a yellow hyaline spot beyond. Length of the body 9 lines; of the wings 18 lines.

Var. β. Fore wings with some crimson marks on the fore border near the base, and with a large yellow spot on the hind border near the base; their bands each composed of two spots.

a. Ega, Brazil. From Mr. Bates' collection.
b. Parà. From Mr. Bates' collection.
c. Tapajos. From Mr. Bates' collection.
d. Brazil. From Mr. Bates' collection.

2. Pericopis Isse.

Nigro-fusca; caput albo guttatum; palpi pedesque subtus albi; thorax guttis anticis albis posticis luteis; abdomen ferrugineum, subtus flavum; alæ anticæ basi rufo strigatæ, fasciis duabus obliquis plus minusve macularibus flavis hyalinis, guttisque nonnullis apicalibus albis; posticæ rufæ nigro strigatæ marginibus nigris rufo guttatis.

Episteme Isse, *Hübn. Samml. Exot. Schmett.* 27, 254, f. 507, 508.

a, b. Ega, Amazon River. From Mr. Bates' collection.

3. Pericopis decisa.

Nigra; caput et thorax albo guttata; palpi pedesque subtus albi; abdomen fuscum, subtus flavum; alæ anticæ fasciis duabus obliquis flavis guttisque apicalibus albis; posticæ vitta lata interupta flava rufo marginata maculisque marginalibus rufis.

Nealy allied to *P. Isse.*

Black. Head, thorax and fore wings at the base with white dots. Palpi and legs white beneath. Thorax with two indistinct testaceous dorsal stripes. Abdomen brown, yellow beneath. Fore wings with two oblique yellow bands, the second interrupted hindward, and with a row of white dots along the outer border. Hind wings with a broad yellow discal stripe, bordered with red, and interrupted towards its tip; a row of marginal red spots. Length of the body 10 lines; of the wings 33 lines.

a. Santa Fé de Bogota. From M. Parzudaki's collection.

4. Pericopis angulosa.

Caput et thorax nigra, albo guttata, hic fulvo maculatus; abdomen fuscum, subtus testaceum; alæ fulvæ, marginibus nigris flavo guttatis; anticæ nigro anguloso strigatæ, apices versus nigræ fasciis duabus obliquis flavis.

Black. Head and thorax with white dots. Palpi and legs white beneath; coxæ testaceous beneath. Thorax with tawny spots. Abdomen brown, testaceous at the base and beneath where there is a black stripe on each side. Wings tawny with black yellow-dotted borders. Fore wings with a black stripe along the hind border, and another very short one near the fore border and widening from the base; beyond is an oblique angular black band nearly parallel to the outline of the black towards the tip and divided from it in front by a short yellow band, which is parallel to the yellow oblique subapical band. Hind wings with a black stripe in front. Length of the body 10—11 lines; of the wings 32—36 lines.

a—d. Venezuela. From Mr. Dyson's collection.

5. Pericopis Zerbina.

Fulvescens; caput albo guttatum; antennæ nigræ; abdomen nigro vittatum; alæ nigro venosæ, marginibus nigris albo guttatis, anticæ fasciis duabus obliquis flavis, 1a abbreviata, triente apicali nigra.

Phalæna Zerbina, *Stoll, Suppl. Cram. Pap. Exot.* v. 173, pl. 70, f. 3.
Pericopis Zerbina, *Hübn. Verz. Schmett.* 175, 1808.
Surinam.

Var.? *Fusca; thorax antice flavo maculatus; abdomen flavo quadrivittatum apice luteum; alæ anticæ bifasciatæ, fascia 1a perobliqua diffusa antice flava, 2a obliqua flava; posticæ fulvæ vitta postica ramosa marginibusque nigris, his albo guttatis.*

Brown. Head with white dots. Thorax in front with yellow spots and with one dorsal white spot. Abdomen with four yellow stripes which are tawny towards the base; under side yellow except a slender middle stripe; tip luteous. Fore wings tawny for half the length from the base and for more than half the breadth from the costa including a yellow stripe and a brown spot in front; a yellow oblique band nearly parallel with the outline of the tawny part. Hind wings tawny, with a black hindward stripe which emits branches along the veins, and with a black white-dotted border. Length of the body 10 lines; of the wings 32 lines.

a. South America. From Mr. Milne's collection.
b. South America. From Mr. Warwick's collection.

6. Pericopis Eurocilia.

Ferruginea; caput, thorax anticus et abdomen albo guttata; thoracis et abdominis latera flavo vittata; alæ guttis marginalibus albis; anticæ vitta basali postica, fascia obliqua brevi antica apicibusque piceis, fascia quoque lata media maculam piceam cingente posticeque abbreviata et incisa flava; posticæ piceæ basi rufæ striyis discalibus ferrugineis.

Phalæna Eurocilia, *Cram. Pap. Exot.* ii. 126, pl. 178, f. C.
Zygæna Eurocilia, *Fabr. Sp. Ins.* ii. 163, 34; *Mant. Ins.* ii. 105, 41; *Ent. Syst.* ii. *Gmel. ed. Syst. Nat.* i. 5, 2397, 137.

Pericopis Eurocilia, *Hübn. Verz. Schmett.* 176, 1809.
West Indies.

7. Pericopis indecisa.

Fuscus; thorax antice flavo guttatus; abdomen fasciis duabus ventreque flavis; alæ anticæ fasciis tribus obliquis flavis, 1a lata antica, 2a interrupta posticeque abbreviata, 3a integra; alæ posticæ flavæ, postice et apud apices rufæ nigro marginatæ alboque guttatæ.

Brown. Thorax with yellow spots and dots in front. Abdomen with two yellow stripes; under side yellow. Fore wings with three oblique yellow bands which are brightest and most clearly defined beneath; first basal, broader than long, and not extending beyond the fore half of the wing; second interrupted in the middle, shortened hindward; third entire. Hind wings yellow, with broad black borders which are shortened hindward and contain a row of red spots and beyond them another of white dots. Legs whitish beneath. Length of the body 9 lines; of the wings 32 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

8. Pericopis subguttata.

Nigro-fusca; thorax flavo bimaculatus; abdomen flavo quadrivittatum, subtus flavum nigro unilineatum; alæ anticæ fulvæ, apices versus flavescentes, fasciis duabus obliquis apicibusque fuscis; posticæ luteæ nigro venosæ, marginibus fuscis flavo guttatis.

Blackish brown. Thorax with a yellow spot on each shoulder. Abdomen with four yellow stripes; under side yellow, with a slender black middle stripe. Fore wings tawny, brown at the tips and with two brown oblique slightly undulating bands, the second dilated hindward; space between the bands and between the second band and the tip mostly yellow. Hind wings luteous with black-bordered veins, and with broad blackish brown borders which contain yellow dots; these borders are tawny with brown edges beneath. Length of the body 11 lines; of the wings 32 lines.

a, Rio Janeiro. From Mr. Stevens' collection.

9. Pericopis bivittata.

Fusca ; caput nigrum, albo guttatum ; thorax antice flavo quadrimaculatus ; abdomen nigro-fuscum, luteo quadrivittatum, subtus flavum ; alæ anticæ basim versus fulvescentes, fasciis duabus mediis obliquis flavis ; posticæ luteæ vitta ramosa marginibusque nigris, his albo guttatis.

Brown. Head black, with white dots. Thorax with four yellow spots in front. Abdomen blackish brown, with four luteous stripes, yellow beneath; middle dorsal stripes green at the tips. Fore wings mostly tawny towards the base; two oblique yellow discal bands, the first tawny hindward; a row of white dots along the tips. Hind wings luteous, with a black ramose stripe; hind borders black with white dots. Length of the body 8½ lines; of the wings 27 lines.

a. Venezuela. From Mr. Dyson's collection.

10. Pericopis humeralis.

Mas. *Nigro-fusca ; thorax flavo sexmaculatus ; femora subtus flava ; alæ anticæ striga basali maculisque tribus anticis flavis, et striga antica basali coccinea necnon macula antica media fasciaque subapicali obliqua e maculis duabus, flavo-limpidis, subtus apices versus rufæ ; posticæ fulvæ, marginibus nigro-fuscis flavo-hyalino guttatis.*

Blackish brown. Antennæ moderately pectinated. Thorax with six yellow spots, two in front, two on the disk, and two by the fore wings. Fore wings indistinctly tinged here and there with yellow; two basal streaks, the fore one crimson, the other yellow; three yellow spots along the fore border; a yellow limpid spot in front of the middle, and an oblique yellow limpid band composed of two spots towards the tip; under side bright red at the tips and along the adjoining parts of the borders. Hind wings tawny, with a broad blackish brown border which contains a row of yellow semi-hyaline spots; on the under side the band almost disappears, and the spots are larger and more distinct. Length of the body 12 lines; of the wings 30 lines.

a. ——— ? Presented by E. Doubleday, Esq.

11. PERICOPIS NUBILA.

Nigro-fusca; thorax antice testaceo guttatus; abdomen fulvum, vittis tribus segmentorum marginibus posticis apiceque nigris, subtus testaceum nigro trivittatum; alæ anticæ ferrugineæ, vitta postica fascia obliqua, macula apud areolæ discalis apicem apiceque late nigro-fuscis; posticæ fulvæ; margine lato nigro testaceo subguttato.

Blackish brown. Thorax with pale testaceous dots in front. Abdomen tawny, with three black stripes, the middle one broad, the other two slender; hind borders of the segments and tip also black; under side testaceous, with three black stripes. Legs whitish beneath; fore coxæ testaceous beneath. Fore wings ferruginous; a stripe along most of the hind border, an oblique band joining the end of the stripe, a mark by the discal areolet, and the tips dark brown; this colour occupies the whole of the outer border, but is much broader in front than behind, and is indented in the middle. Hind wings tawny, with a broad black border which contains a row of indistinct testaceous dots. Length of the body 11 lines; of the wings 28 lines.

a. Brazil. From M. Becker's collection.

12. PERICOPIS PATULA.

Nigro-fusca; caput et thorax albo guttata; abdomen album vitta dorsali nigro-fusca; pedes subtus albi; alæ anticæ fascia media obliqua abbreviata flava maculaque subapicali alba; margine latissimo nigro-fusco.

Blackish brown. Head and thorax with white dots. Abdomen white with a blackish brown dorsal stripe; tip and fore borders of the segments also blackish brown. Legs white beneath. Fore wings in the middle with a yellow oblique band which does not nearly extend to the hind border and is traversed by black bands. Hind wings yellow or white with pale veins and with very broad blackish brown borders. Length of the body 7—8 lines; of the wings 22—24 lines.

a, *b*. Bolivia. From Mr. Bridges' collection.

13. Pericopis submarginata.

Fusca; thorax maculis quatuor subconfluentibus quatuorque humeralibus flavis; abdomen flavum, vitta dorsali et segmentorum marginibus posticis fuscis, subtus pallide testaceum; pedes subtus albidi; alæ anticæ cinereo-hyalinæ, areolarum strigis, vitta brevi lata postica apicibusque fuscis; posticæ flavo-hyalinæ margine fusco flavo-hyalino maculato.

Brown. Palpi and antennæ black. Antennæ minutely pectinated. Thorax with four almost confluent yellow spots forming a band in front, and with two by the base of each fore wing. Abdomen with a row of large yellow spots on each side; under side pale testaceous. Legs whitish beneath. Fore wings cinereous-hyaline, with the disks of the areolets, a broad stripe extending from the base along the hind border for half the length of the wing, and the tips brown; discal areolet with two brown marks, one in the middle, the other at the tip. Hind wings yellowish hyaline, with a brown border which contains a row of yellowish hyaline spots. Length of the body 9 lines; of the wings 19 lines.

a. Brazil. From M. Becker's collection.

14. Pericopis parnassiodes.

Nigro-fusca; thorax maculis quatuor anticis flavis duabusque humeralibus coccineis; abdomen vittis duabus ventreque flavis, apice luteo; alæ anticæ cinereo-subhyalinæ, vitta costali completa postica abbreviata, maculis duabus anticis apiceque lato, nigro-fuscis; alæ posticæ flavæ, nigro-fusco late marginatæ.

Blackish brown. Antennæ minutely pectinated. Thorax with four yellow spots forming a curved band in front, and with a crimson dot by the base of each fore wing. Abdomen with two yellow stripes; under side yellow, tips luteous. Fore wings gray, slightly hyaline; two spots on the discal areolet, a complete stripe in front, a shorter and broader one on the discal areolet, and nearly one-third of the length from the tips blackish brown. Hind wings yellow, with broad blackish brown borders. Length of the body 8 lines; of the wings 20 lines.

a. Brazil. Presented by W. W. Saunders, Esq.

15. PERICOPIS TURBIDA.

Mas. *Alæ anticæ cinereo-hyalinæ, marginibus fasciisque duabus nigro-fuscis; posticæ flavescente hyalinæ fascia una marginibusque nigris.* Fœm. *Alæ nigro-fuscæ; anticæ fasciis duabus cinereo-hyalinis; posticæ macula antica alba vittaque postica rufa.*

Episteme turbida, *Hübn. Samml. Exot. Schmett.* 31, 265, f. 529, 530.
Mas. Phalæna Aglaura, *Cram. Pap. Exot.* iii. 126, pl. 263, f. F.
Fœm. Phalæna tricolora, *Sulz. Gesch.* pl. 22, f. 5. *Cram. Pap. Exot.* iii. 125, pl. 263, f. E.
Pericopis turbida, *Hübn. Verz. Schmett.* 176, 1810.
Pericopis tricolora, *Hübn. Verz. Schmett.* 176, 1811.

Male. Black. Antennæ minutely pectinated. Thorax with two yellow spots on each side, forming a curved band in front. Abdomen with two pale yellow stripes which are interrupted on the hind border of each segment; under side pale yellow; tip luteous. Fore wings grayish hyaline, with dark brown borders and tips, and with two dark brown bands; the first before the middle, very slight, the second beyond the middle, much broader and more distinct. Hind wings yellowish hyaline with black borders, and with one black band which is in a line with the first band of the fore wings.

Var. β. Mas. Abdomen with two blue stripes. Hyaline part of the fore wings very slightly grayish; first band hardly traceable. Hind wings limpid, except the band and border.

Var. γ. Mas. Like *Var. β.* Hyaline part of the fore wings very darkly gray; both the bands broad and very distinct.

Fem. Blackish brown. Antennæ minutely serrated. Fore wings with a red mark at the base, and with two obscure cinereous hyaline bands, the first beyond the middle, the second nearer the tip. Hind wings with a short broad red stripe behind extending outward from the inner border, and with a large white spot near the fore border at two-thirds of the length.

Var. β. Hind wings with the red stripe macular, its last spot near the tip; white spot of moderate size.

Var. γ. Red stripe macular; white spot small.

Var. δ. Fore wings with the first band white, second obsolete. Hind wings with the red stripe very little longer than broad; white spot small.

Var. ε. Like *Var.* δ. White spot extremely small.

a, *b*. Venezuela. From Mr. Dyson's collection.
c. Parà. From Mr. Bates' collection.
d. Brazil. From Mr. Bates' collection.

16. Pericopis leucophæa.

Nigro-fusca; thorax antice albo guttatus; alæ anticæ basi coccineo guttatæ; posticæ margine rufo maculato alboque guttato; mas, *abdomen apice luteum; alæ anticæ cinereo subhyalino bifasciatæ;* fœm. *abdominis segmentum apicale luteo marginatum.*

Male. Blackish brown. Antennæ very minutely pectinated. Thorax with several white dots in front. Fore wings with a crimson dot on each at the base. Hind wings with a row of crimson spots near the hind border, close to which there is a row of white dots. *Male.* Abdomen with a luteous tip. Fore wings with two gray slightly oblique irregular nearly connected semihyaline bands, the subapical one clearer than the first. *Fem.* Last abdominal segment with a luteous margin. Length of the body 9—10 lines; of the wings 24—28 lines.

a, *b*. Mexico. Presented by E. Doubleday, Esq.

17. Pericopis subapicalis.

Fœm. *Nigro-fusca, cinerascens; abdomen subtus apice luteum; alæ subtus basi rufo guttatæ; anticæ fascia subcinerea hyalina; posticæ cyaneo-nigræ marginibus albo guttatis.*

Fem. Blackish brown, suffused with gray. Antennæ minutely setose or indistinctly serrated. Abdomen luteous at the tip beneath. Wings with red dots at the base beneath. Fore wings before the middle with an indistinct oblique black band, and beyond the middle with a nearly upright grayish hyaline band which is white beneath. Hind wings bluish black, with white dots along the hind border. Length of the body 10 lines; of the wings 26 lines.

a, *b*. Brazil. From Mr. Stevens' collection.
c. Brazil. From Mr. Bates' collection.

Genus 14. ALETIS.

Corpus lineare, cylindricum, longiusculum, sat validum, albo maculatum. Palpi porrecti, capite breviores; articulus 2us 1o non brevior; 3us conicus, minimus, 2o plus quadruplo brevior. Antennæ in utroque sexu simplices, subsetosæ. Abdomen alas posticas non superans. Pedes gracillimi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ longæ, sat latæ, maculis marginalibus albis, venis quatuor inferioribus.

Aletis, *Hübn. Verz. Schmett.* 179.

Body linear, cylindrical, rather long, of moderate thickness, with white spots. Palpi porrect, shorter than the head; second joint full as long as the first; third conical, very small, not one-fourth of the length of the second. Antennæ simple in both sexes, beset beneath with minute bristles. Abdomen not extending beyond the hind wings. Legs very slender; hind tibiæ with two small apical spurs. Wings long, rather broad; four inferior veins; borders with white spots.

1. ALETIS HELCITA.

Nigra, albo confertim maculata; alæ rufæ, marginibus late nigris albo maculatis.

Papilio (Dan. Cand.) Helcita, *Linn. Amœn. Acad.* vi. 405, 62; *Syst. Nat.* ii. 763, 94. *Clerck, Icon.* pl. 39, f. 4, (*Edw. Glean.* pl. 340). *Gmel. ed. Syst. Nat.* i. 5, 2267, 94.

Phalæna fusulis, *Linn. Mus. Ulr.* 390, 25.

Phalæna (Noctua) Helcita, *Drury, App.* iii. *Ill. Exot. Ins.* iii. 40, pl. 29, f. 4.

Phalæna Helcita, *Cram. Pap. Exot.* ii. 48, pl. 129, f. C.

Phalæna macularia, *Fabr. Sp. Ins.* ii. 246, 27; *Mant. Ins.* ii. 188, 34; *Ent. Syst.* iii. 2, 140, 40.

Aletis Helcita, *Hübn. Verz. Schmett.* 179, 1850.

Callimorpha? Helcita, *Westw. ed. Drury*, iii. 41, pl. 29, f. 4. *Duncan, Naturalist's Library*, xxxvii. *Exotic Moths*, 189, pl. 33, f. 2.

The outline of the red of the fore wings is sometimes straight, sometimes angular, and in the latter case the opposite white band is most interrupted.

a. Zoolu Country, South Africa. Presented by G. F. Angas, Esq.
b, *c*. Ashanti. From the Wesleyan Missionary Society's collection.
d. West Africa. Presented by E. Doubleday, Esq.
e. Congo. Presented by Sir J. Richardson.
f. Ashanti. Presented by E. Doubleday, Esq.
g. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 15. PHÆGORISTA.

Corpus sat validum, sublineare, fere cylindricum, longitudine mediocri. Palpi porrecti, capite longiores; articulus 2us lo multo longior; 3us 2o multo gracilior et paullo brevior. Antennæ *maris* latissime pectinatæ, *fœminæ* subpectinatæ. Abdomen alarum margines posticas attingens. Pedes sat validi; tibiæ posticæ calcaribus quatuor longissimis. Alæ longæ, mediocriter latæ, venis quatuor inferioribus.

Phægorista, *Boisduval.*

Body rather stout, nearly linear and cylindrical, of moderate length. Palpi porrect, longer than the head; second joint much longer than the first; third much more slender and a little shorter than the second. Antennæ of the male very deeply pectinated, of the female very minutely pectinated. Abdomen extending as far as the hind wings. Legs rather stout; hind tibiæ with four very long spurs. Wings long, moderately broad; four inferior veins.

1. PHÆGORISTA AGARISTOIDES.

Nigra, albo strigata; abdominis segmenta albo marginata; alæ guttis marginalibus albis; anticæ fascia lata testacea alteraque brevi alba; posticæ rufæ nigro marginatæ.

Phægorista Agaristoides, *Boisd. Spec. Gén. Lép.* i. pl. 14, f. 10.

Black. Head and thorax streaked with white. Palpi testaceous towards the base. Proboscis piceous. Pectus and hind part of the thorax and base of the abdomen clothed with testaceous hairs. Abdomen with a white band on the hind border of each segment. Legs with white stripes. Wings with white dots along the borders. Fore wings with a broad testaceous stripe which extends from the base near the hind border to nearly half the length, and is generally of a somewhat fusiform shape; beyond the middle there is a short oblique white band, and a white spot between it and the hind border. Hind wings red, with black borders. Length of the body 6—9 lines; of the wings 22—30 lines.

Var. β. Band and spot of the fore wings testaceous.

a, *b*. Ashanti. From the Wesleyan Missionary Society's collection.
c. Ashanti. Presented by E. Doubleday, Esq.
d. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 16. PHALOE.

Corpus sublineare, fere cylindricum, sat gracile, longitudine mediocri. Palpi ascendentes, recti, capite vix breviores; articulus 3us gracilis, 2i dimidio longior. Antennæ *maris* sat late pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen *maris* alas posticas vix superans, *fœminæ* paullo brevior. Pedes sat graciles; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ sat amplæ, ex parte hyalinæ.

Phaloë, *Guér. Voy. Duperrey, Zool.* ii. 283.
Pericopis, p., *Hübn. Samml. Exot. Schmett.* 24, 165.

Body nearly linear and cylindrical, rather slender, of moderate length. Palpi ascending, straight, nearly as long as the head; third joint slender, more than half the length of the second. Antennæ pectinated rather deeply in the male, moderately in the female. Abdomen extending hardly beyond the hind wings in the male, a little shorter in the female. Legs rather slender; hind tibiæ with two minute apical spurs. Wings rather long and broad, partly hyaline.

1. Phaloe cruenta.

Corpus supra fuscum, subtus albidum; caput et thorax albo punctata; anus sanguineus; alæ integræ elongatæ, utrinque anticæ fuscæ, maculis luteo-vitreis ad apicem albis, punctis ad costam versus basim rubro-sanguineis; posticæ luteo-vitreæ, venis nigris, margine lato nigro punctis minutis albis notato.

Pericopis cruenta, *Hubn. Samml. Exot. Schmett.* ii. 24, 165, f. 329, 330.
Phaloë cruenta, *Guér. Voy. Duperrey, Zool.* ii. 284, *Atlas, Ins.* pl. 19, f. 4.

Buenos Ayres.

The male has not the black band of the hind wings which distinguishes the female, nor is the black hind border ramose. The female varies much in size, and the yellow oblique bands of its fore wings are also variable, and are more or less macular.

a—d. Venezuela. From Mr. Dyson's collection.
e. Brazil. From Mr. Mornay's collection.
f. Brazil.

Genus 17. STENELE.

Corpus gracile, sublineare, fere cylindricum, longitudine mediocri. Palpi capite paullo longiores; articulus 3us 2o vix brevior. Antennæ *maris* subpectinatæ, *fœminæ* subserratæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ sat amplæ, anticæ venis tribus inferioribus.

Body slender, moderately long, nearly linear and cylindrical. Palpi rather longer than the head; third joint nearly as long as the second. Antennæ slightly pectinated in the male, minutely serrated in the female. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ with four small spurs. Wings rather long and broad; fore wings with three inferior veins; first and second nearly together, remote from the third.

1. STENELE TRANSLATA.

Mas. *Testacea; alæ luteæ; anticæ apices versus nigro-fuscæ fascia obliqua testacea; posticæ macula discali marginibusque nigro-fuscis.*

Body testaceous, slightly cupreous, whitish beneath. Head with a brown spot on each side of the vertex. Palpi brown, whitish towards the base. Proboscis tawny. Antennæ black. Thorax with luteous hairs on each side. Legs blackish; femora with whitish stripes. Wings luteous. Fore wings blackish brown for nearly half the length from the tips, including a pale testaceous oblique irregular band which is almost divided near the middle, and its hinder part is composed of two spots; a testaceous stripe in front. Hind wings with irregular blackish brown borders and a black spot in the disk; under side paler. Length of the body 7 lines; of the wings 22 lines.

a. Tapajos, Brazil. From Mr. Bates' collection.

Fœm. *Nigra, subtus albida; caput albo varium; thorax testaceo vittatus; abdominis dorsum luteum, vittis duabus nigris antice obsoletis; alæ luteæ; anticæ dimidio fere apicali nigro, fascia obliqua abbreviata indentata maculisque marginalibus pallide flavis; posticæ macula rotundata discali margineque nigris.*

Black, whitish beneath. Head mostly white above. Palpi and legs whitish beneath. Thorax with four testaceous stripes. Abdomen luteous above with two black stripes which become obsolete towards the base. Wings luteous, with a slight yellow streak in each. Fore wings black towards the tips with a marginal row of pale yellow dots; a large black reniform spot in the disk adjoining an oblique abbreviated yellow band towards the tip. Hind wings with black borders, and a black rounded spot in the disk, corresponding to that in the fore wings. Length of the body 7 lines; of the wings 20 lines.

a. Parà. From Mr. Bates' collection.

Genus 18. ERCHIA.

Fœm. Corpus gracile, lineare, fere cylindricum, sat longum. Palpi porrecti, graciles, capite multo longiores; articulus 3us linearis, acuminatus, 2o gracilior et duplo brevior. Antennæ graciles, extrorsum subincrassatæ. Pedes breves, graciles; tibiæ calcaribus nullis. Alæ latæ; anticæ venis duabus inferioribus; posticæ abdomen multo superans.

Allied to the *Rhopalocera*. Body slender, linear, nearly cylindrical, moderately long. Palpi porrect, slender, much longer than the head; third joint linear, pointed, more slender than the second and nearly half its length. Antennæ more than half the length of the body, very slightly increasing in breadth from the base nearly to the tips. Legs short and slender; tibiæ without spurs. Wings broad; fore wings with two inferior veins; hind wings extending much beyond the abdomen.

1. Erchia extranea.

Nigro-fusca, luteo-hirta; palpi et pedes subtus albidi; abdomen subtus testaceum; alæ anticæ macula magna lutea fasciaque lata obliqua flava; posticæ luteæ, margine lato nigro maculisque posticis albidis.

Blackish brown. Palpi and legs whitish beneath. Proboscis whitish. Antennæ black. Thorax and abdomen with luteous hairs. Abdomen testaceous beneath. Fore wings with a large luteous spot which extends from the base and occupies more than half the breadth from the hind border and less than half the length and ends very obliquely; beyond it there is a very broad oblique pale yellow band which does not reach the hind border. Hind wings luteous, partly yellowish in front, with a black border which is very broad behind

and there contains some whitish spots, in front it is slightly indented and contains a luteous streak. Wings much paler beneath. Length of the body 6½ lines; of the wings 20 lines.

a. Parà. From Mr. Bates' collection.

Genus 19. MASSAGA.

Corpus gracile, sat longum. Palpi pilosi, capite breviores; articulus 3us acuminatus, minimus. Antennæ graciles, extrorsum subincrassatæ. Alæ latæ, fasciis semihyalinis; anticæ venis quatuor inferioribus; posticæ abdomen superantes.

Chalcosia, p., *Hübn. Verz. Schmett.* 173.

Allied to the *Rhopalocera*. Body slender, linear, moderately long. Palpi shorter than the head, hairy; third joint acuminated, very minute. Antennæ slender, shorter than the body, very slightly increasing in breadth from the base nearly to the tips. Legs hairy; hind tibiæ with four spurs; apical pair long. Wings broad, with white semi-hyaline bands; fore wings with four inferior veins; hind wings extending beyond the abdomen.

1. Massaga Hesparia.

Nigra, purpureo cyaneoque nitens; caput, palpi, prothorax et pedes antici coccineo-hirta; alæ albo unifasciatæ.

Phalæna Hesparia, *Cram. Pap. Exot.* i. 87, pl. 56, f. C.
Chalcosia Hesperina, *Hübn. Verz. Schmett.* 173, 1786.

Demerara.

Black, with purple and blue reflections. Head, palpi, prothorax, fore coxæ and fore femora clothed with crimson hairs. Antennæ and proboscis piceous. Fore wings with a nearly upright middle band which is very slightly concave on its inner side and much dilated in the middle of its outer side; tips fringed with white hairs. Hind wings with a broad white band which decreases slightly in breadth from the middle of the inner border to near the middle of the fore border where it ceases. Length of the body 6—8 lines; of the wings 18—24 lines.

Var. β. Bands of the wings very narrow.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.
b. ——— ? Presented by E. Doubleday, Esq.

Genus 20. PHALOESIA.

Corpus sublineare, cylindricum, sat validum, mediocriter longum. Palpi porrecti, capite breviores; articulus 3us conicus, 2o triplo brevior. Antennæ *maris* sat late pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen *maris* alas posticas paullo superans, *fœminæ* brevior. Pedes validi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ longiusculæ, mediocriter latæ; anticæ ex parte hyalinæ, venis tribus inferioribus.

Body nearly linear and cylindrical, rather stout, moderately long. Palpi porrect, shorter than the head; third joint conical, about one-third of the length of the second. Antennæ pectinated, rather deeply in the male, moderately in the female. Abdomen in the male extending not so far as the hind wings, in the female a little beyond them. Legs stout; hind tibiæ with two minute apical spurs. Wings rather long, moderately broad. Fore wings partly hyaline, with three inferior veins.

1. PHALOESIA SAUCIA.

Piceo-niger; prothorax maculæque duæ humerales rufa; abdomen coccineo bivittatum; alæ anticæ strigis duabus anticis basalibus coccineis, macula antica media fasciaque subapicali maculari albis.

Brownish black. Palpi, proboscis and antennæ black. Palpi white beneath. Thorax bright red in front and on each side of the fore wings. Abdomen with a red stripe on each side. Legs with white spots. Fore wings with a red costal streak at the base; a little beyond this streak and near the fore border there is a red spot which joins a whitish short semihyaline streak beyond it and by the costa; an upright whitish semihyaline band near the tip composed of five spots. Hind wings bluish black, with a white fringe. Length of the body 7—8 lines; of the wings 22—24 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.
c. ———? From Mr. Children's collection.
d. Nicaragua.

Genus 21. RHOSUS.

Corpus angustum, sublineare, sat longum. Palpi porrecti, pilosi, capite breviores; articulus 3us *maris* 2o brevior, *fœminæ* multo brevior. Antennæ serratæ. Pedes pilosi, validi; tibiæ posticæ calcaribus duobus longis apicalibus. Alæ latiusculæ, ex parte semi-

hyalinæ, anticæ venis quatuor inferioribus, posticæ abdomen paullo superantes.

Body narrow, nearly linear, of moderate length. Palpi hairy, porrect, not so long as the head; third joint pointed, shorter than the second, much shorter in the female than in the male. Antennæ serrated. Legs hairy, stout; hind tibiæ with two long apical spurs. Wings rather broad, partly semihyaline; fore wings with four inferior veins; hind wings extending a little beyond the tip of the abdomen.

1. Rhosus posticus.

Nigro-fusca; abdomen subtus flavum apice luteum; coxæ anticæ subtus flavæ; alæ anticæ maris *macula oblonga transversa obliqua discali testacea semihyalina; posticæ* maris *vittis tribus clavatis abbreviatis testaceis,* fœm. *disco testaceo.*

Male. Blackish brown. Proboscis pale testaceous. Abdomen yellow beneath, luteous at the tip. Fore coxæ yellow beneath. Fore wings with an oblong transverse oblique semihyaline testaceous spot in the disk a little beyond the middle and near the fore border. Hind wings with three testaceous semihyaline stripes widening from the base to about half the length; the fore one much broader than the other two. Length of the body 6½—7 lines; of the wings 16—19 lines.

Fœm. Fore coxæ black beneath. Spot on the fore wings much larger than in the male. Hind wings testaceous, with blackish brown borders. Length of the body 6½—7 lines; of the wings 16—19 lines.

a. South America. From M. Becker's collection.
b. Venezuela. From Mr. Dyson's collection.

Genus 22. COMPOSIA.

Corpus fere cylindricum, sat validum, longitudine mediocri. Palpi ascendentes, capite breviores; articulus 2us 3o plus duplo longior. Antennæ *maris* pectinatæ, *fœminæ* subpectinatæ. Abdomen alarum margines posticas attingens, *maris* oblanceolatum, *fœminæ* fusiforme. Pedes sat graciles, anticæ subtus excavatæ, posticæ calcaribus duobus minutis apicalibus. Alæ longæ, sat angustæ, maculis numerosissimis semihyalinis.

Composia, p., *Hübn. Verz. Schmett.* 179.
Phalæna Bombyx, p., *Cram.; Pal. Beauv.*
Bombyx, p., *Fabr.*

Body neatly cylindrical, rather stout, of moderate length. Palpi vertical, shorter than the head; third joint less than half the length of the second. Antennæ of the male slightly pectinated, of the female minutely pectinated. Abdomen oblanceolate in the male, fusiform in the female, extending as far as the hind wings. Legs rather slender; fore tibiæ excavated beneath; hind tibiæ with two minute apical spurs. Wings long, rather narrow, with semihyaline spots.

1. COMPOSIA SYBARIS.

Atra, subtus alba; corpus et alæ albo confertim guttata; alæ anticæ maculis quatuor anticis basalibus subquadratis coccineis.

Phalæna Bombyx Sybaris, *Cram. Pap. Exot.* i. 112, pl. 71, f. E. *Palisot de Beauvois, Ins. d'Afr. et Amer. Lepid.* pl. 24, f. 7.
Bombyx credula, *Fabr. Ent. Syst.* iii. 1, 475.
Composia credula, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, viii. *Callimorphæ* B. *Variegatæ*, ii. f. 1—4; *Verz. Schmett.* 179, 1851.
Hypercompa? Sybaris, *Duncan, Nat. Libr.* xxxviii. *Exotic Moths*, 186, pl. 23, f. 1.

a, b. Jamaica. From Mr. Gosse's collection.
c, d. ——? From Mr. Milne's collection.

Genus 23. OPHTHALMIS.

Ophthalmis, p., *Hübn. Verz. Schmett.* 166.

1. OPHTHALMIS LINCEA.

Nigra; thorax margine antico albo; abdomen apice luteum; alæ anticæ cyaneo trimaculatæ apice luteæ; posticæ luteo late marginatæ.

Phalæna Lincea, *Cram. Pap. Exot.* iii. 61, pl. 228, f. B.
Ophthalmis Lincea, *Hübn. Verz. Schmett.* 166, 1719.

Surinam.

Genus 24. EUCYANE.

Corpus subcylindricum, fere lineare, sat validum, mediocriter longum. Palpi ascendentes, capitis longitudine; articulus 3us linearis, 2i dimidio paullo longior. Antennæ *maris* pectinatæ, *fœminæ* serratæ. Abdomen alarum margines posticas non aut vix attingens. Pedes sat validi; tibiæ posticæ calcaribus quatuor parvis. Alæ amplæ, venis quatuor inferioribus.

Eucyane, *Hübn. Verz. Schmett.* 177.
Calodesma, *Hübn. Verz. Schmett.* 177.
Ephestris, p., *Hübn. Verz. Schmett.* 178.

Body nearly cylindrical and linear, rather stout, moderately long. Palpi ascending, as long as the head; third joint linear, rather more than half the length of the second. Antennæ of the male moderately pectinated, of the female serrated. Abdomen hardly extending to the hind-border of the hind wings in the male, a little shorter in the female. Legs moderately stout; hind tibiæ with four small spurs. Wings ample; fore wings with a semihyaline band; four inferior veins.

Group 1. Wings very broad.

1. Eucyane Pylotis.

Atro-cærulea; abdomen subtus luteum; marginibus posticis nigris; anticæ fascia lata media alba, apice albo ciliatæ; posticæ albo ciliatæ.

———, *Drury, Ins. Exot.* ii. 9, pl. 5, f. 3.
Phalæna (Bombyx) Pylotis, *Drury, App.* ii. *Oliv. Enc. Méth.* v. 99, 255. *Fabr. Sp. Ins.* 263; *Syst. Ent.* 585.
Callimorpha? Pylotis, *Westw. ed. Drury*, ii. 11, pl. 5, f. 3.

Honduras.

a. Mexico. From M. Becker's collection.
b, *c*. Mexico. From Mr. Argent's collection.

2. Eucyane excellens.

Cærulea; palpi pedesque subtus albi; abdomen subtus coccineum, nigro alboque fasciatum; alæ ex parte albo ciliatæ; anticæ fascia obliqua integra alba guttisque duabus coccineis; posticæ fascia maculari abbreviata alba.

Blue, tinged with green and purple. Head with two white dots on each side above. Proboscis testaceous. Palpi and legs white beneath. Abdomen beneath except at the base with a crimson white-bordered band on each segment. Wings with a partial white fringe which is broadest beneath. Fore wings bluish-black with an oblique entire white band, whose hind end is by the tip of the hind wings; a crimson dot on each border close to the inner side of the band, the hind dot sometimes almost obsolete. Length of the body 9 lines; of the wings 30 lines.

a—*c*. Venezuela. From Mr. Dyson's collection.

3. Eucyane Celadon.

Cyanea; alæ anticæ nigræ basi cyanescentes, fascia arcuata alba postice angustata et subinterrupta; posticæ guttis submarginalibus albis, fimbria ex parte alba.

Phalæna Celadon, *Cram. Pap. Exot.* ii. 55, pl. 132, f. E.
Eucyane Celadon, *Hübn. Verz. Schmett.* 178, 1833.

Surinam.

4. Eucyane melaxantha.

Nigra; thorax et abdomen luteo trivittata, hoc subtus luteum; alæ anticæ fascia lata abbreviata discali, gutta apicali et apud dimidium basale strigis duabus vittaque intermedia trigona luteis; alæ posticæ luteæ margine nigro, hoc vitta interna gutta una postica alteraque apicali interrupto, luteis.

Hipocrita superba melaxantha, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Netrices*, iii. *Hipocrita*, D. *Superbæ*, a, f. 1, 2.
Ephestris melaxantha, *Hübn. Verz. Schmett.* 178, 1838.

a, *b*. Brazil. From Mr. Stevens' collection.
c. Brazil. Presented by E. Doubleday, Esq.
d. Brazil.

Group 2. Wings rather narrow.

5. Eucyane glauca.

Fœm. *Læte cyanea; abdomen subtus rufum; alæ plus dimidio apicali nigro, albo ex parte ciliatæ, rufo unifasciatæ.*

Sphinx adscita Glauca, *Cram. Pap. Exot.* ii. 17, pl. 107, f. E.
Eucyane Glauca, *Hübn. Verz. Schmett.* 178, 1835.

Surinam.

Bright blue. Palpi and legs white beneath. Abdomen red beneath, with an interrupted white band on the hind border of each segment. Wings partly fringed with white, black for more than half the length from the tips, the red band oblique in the fore wings, upright in the hind wings.

Var. β. Band narrow in the fore wings, obsolete above and forming only a slight streak beneath in the hind wings.

Var. γ. Bands of the fore wings white.

a. Venezuela. From Mr. Dyson's collection.
b. Ega, on the Amazon. From Mr. Bates' collection.
c. Parà. Presented by Gordon Graham, Esq.
d.

6. Eucyane Amica.

Nigro-cyanea; alæ nigræ, anticæ fascia media, posticæ vitta marginali, roseis.

Phalæna Geometra Amica, *Cram. Pap. Exot.* iv. 158, pl. 370, f. H.
Calodesma Fida (Phalæna vera, Callimorpha variegata), *Hübn. Samml. Exot. Schmett.* iii. 15, 223, f. 445, 446.
Calodesma Amica, *Hübn. Verz. Schmett.* 177, 1828.

Surinam.

a. ——— ? From Mr. Children's collection.

7. Eucyane Militta.

Nigro-fusca; alæ anticæ fascia submedia strigaque transversa intus contigua fulvis.

Phalæna Militta, *Cram. Pap. Exot.* iv. 159, pl. 370, f. 1.
Epidesma Militta, *Hübn. Verz. Schmett.* 177, 1823.

Surinam.

Genus 25. MILIONIA.

Corpus cyaneo-metallicum, sublineare, fere cylindricum, longitudine mediocri. Palpi ascendentes, validi, capite multo breviores; articulus 2us 1o vix brevior; 3us conicus, minimus. Antennæ subtus pilosæ, *maris* nonnunquam subpectinatæ. Abdomen alarum margines posticos non attingens, *maris* apice fasciculatum. Pedes validiusculi; tibiæ posticæ calcaribus quatuor sat longis. Alæ sat latæ, longitudine mediocres, ex parte metallicæ.

Represents the genus *Eucyane* of America. Body metallic blue, nearly linear and cylindrical, of moderate length. Palpi ascending, stout, much shorter than the head; second joint nearly

as long as the first; third conical, very minute, hardly one-fourth of the length of the second. Antennæ pilose beneath in both sexes, the hairs longer in the male than in the female, or slightly pectinated in the male. Abdomen not extending so far as the hind wings, slightly tufted at the tip in the male. Legs rather stout; hind tibiæ with four spurs of moderate length. Wings rather broad, partly metallic.

Div. 1.

Male. Antennæ pilose, not pectinated. Hind tibiæ dilated.

1. MILIONIA GLAUCA.

Cyanea; alæ nigræ, basi cyaneo strigatæ; anticæ fascia lata subobliqua discali lutea; posticæ maris *dimidio postico luteo maculis marginalibus nigris.*

Phalæna glauca, *Cram. Pap. Exot.* iv. 152, pl, 368, f. D.

Amboina.

Var. β. Fem. Fore wings with some red marks near the base; the luteous band darker, more upright and nearer the tip of the wing, red towards the hind border. A distinct species?

a. Silhet. From Mr. Argent's collection.
b. East Indies. Presented by E. Doubleday, Esq.
c. ——? Presented by Major-General Hardwicke.
d. North India. From Mr. L. James' collection.

2. MILIONIA BASALIS.

Cyanea; antennæ nigræ; thorax ex parte nigro-fuscus; abdomen nigro-fuscum fasciis cyaneis; alæ nigræ, basi cyaneo strigatæ; anticæ fascia aurantiaca; posticæ maris *fascia maculisque posticis aurantiacis.*

Bright blue. Proboscis and antennæ black. Thorax partly brownish black. Abdomen brownish black with a blue band on the hind border of each segment. Legs partly black. Wings black, streaked with bright blue towards the base. Fore wings with an oblique and slightly curved orange band in the middle; its hind end contiguous to the orange band near the tips of the hind wings in

the male; borders of the hind wings of the male with orange spots. Length of the body 6—7 lines; of the wings 23—24 lines.

a. Java. From Mr. Argent's collection.
b, *c*. ——— ?

Div. 2.

Male. Antennæ slightly pectinated. Hind tibiæ not dilated.

3. MILIONIA INTERCISA.

Cyanea; palpi et antennæ nigra; alæ nigræ; fascia obliqua lutea, strigis basique subtus cyaneis; posticæ dimidio basali cyaneo.

Body and legs mostly metallic blue. Palpi, proboscis and antennæ black. Wings black. Fore wings beyond the middle with a slightly oblique luteous band on which the wings are tinged with blue; under side with blue streaks, and altogether bright blue towards the base. Hind wings bright blue for half the length from the base; a luteous band corresponding to that on the fore wings, tapering towards the hind border which it does not reach; under side with blue streaks towards the tips. Length of the body 7 lines; of the wings 24 lines.

a. Java. From Mr. Argent's collection.

4. MILIONIA EUSEBIA.

Nigro-cinerea; thorax cyaneo trivittatus; abdomen cyaneo fasciatum; alæ anticæ nigræ cyaneo maculatæ fascia brevia discali maculari alba, apices versus nigro-fuscæ linea transversa subapicali cyanea; posticæ nigræ, cyaneo bifasciatæ, cilia alba.

Phalæna Eusebia, *Cram. Pap. Exot.* iv. 155, pl. 369, f. G, H.
Eucyane Eusebia, *Hübn. Verz. Schmett.* 178, 1834.

Amboina.

Genus 26. LYCES.

Corpus gracile, cylindricum, lineare, sat longum. Palpi porrecti, capite paullo breviores; articulus 3us conicus, 2o multo brevior. Antennæ in utroque sexu graciles, subsetosæ. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longæ, sat angustæ, venis tribus inferioribus.

Body slender, cylindrical, linear, rather long. Palpi porrect, a little shorter than the head; third joint conical, much shorter than the second. Antennæ slender, beset with minute bristles in both sexes. Abdomen extending for one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings long, rather narrow, with luteous or yellow semihyaline marks; three inferior veins.

1. LYCES ANGULOSA.

Atra; alæ anticæ fascia obliqua discali lutea; posticæ bistriente lutea nigro marginata.

Deep black. Fore wings with an oblique luteous band whose hind end is by the tips of the hind wings. Hind wings luteous with a black border for two-thirds of the length from the base; this luteous part is subquadrate outward, becomes narrower inward, and almost extends to the inner border. Length of the body 6 lines; of the wings 18 lines.

a. Brazil. From Mr. Stevens' collection.

2. LYCES FLAVISSIMA.

Atra; alæ anticæ fascia obliqua subfusiformi discali lætissime flava; posticæ lætissime flavæ; nigro marginatæ.

Deep black. Head gray beneath. Legs slightly grayish. Fore wings with a very bright oblique nearly fusiform yellow band a little beyond the middle. Hind wings very bright yellow with broad black borders. Length of the body 6—7 lines; of the wings 17—20 lines.

a—c. Venezuela. From Mr. Dyson's collection.

Genus 27. CHRYSAUGE.

Corpus gracile, sublineare, plus minusve elongatum et cylindricum. Palpi capite breviores aut paullo longiores; articulus 3us minimus, aut 2i dimidio vix brevior. Antennæ *maris* plerumque late pectinatæ, nonnunquam simplices, *fœminæ* plerumque simplices, nonnunquam subpectinatæ. Abdomen alas posticas attingens aut paullo superans. Pedes graciles; tibiæ posticæ bicalcaratæ aut quadricalcaratæ. Alæ longitudine mediocres, latitudine variabiles.

Chrysauge, *Hübn. Samml. Exot. Schmett.* ii.
Micropus, *Hübn. Samml. Exot. Schmett.* i. 66.

Atyria, *Hübn. Samml. Exot. Schmett.* 31, 193.
Callimorpha, p., *Perty.*

Body slender, nearly linear, more or less elongated and cylindrical. Palpi shorter or a little longer than the head; third joint from one-tenth to nearly half the length of the second. Antennæ of the male generally deeply pectinated, occasionally simple, of the female generally simple, occasionally slightly pectinated. Abdomen extending as far as the hind wings, or a little beyond them. Legs slender; hind tibiæ with two or with four spurs. Wings of moderate length, variable as to breadth.

Group 1.

Corpus gracile, cylindricum, sublineare. Palpi porrecti, caput paullo superantes; articulus 3us valde acuminatus, 2i dimidio vix brevior. Proboscis thorace paullo brevior. Antennæ graciles, in utroque sexu simplices. Alæ latæ, subtrigonæ. Abdomen alas posticas non superans. Pedes longitudine mediocres; tibiæ anticæ breves, subclavatæ: tarsi antici longi; tibiæ posticæ calcaribus quatuor sat longis.

Body slender, cylindrical, nearly linear, of moderate length. Palpi porrect, shorter than the head; third joint lanceolate, much acuminated, nearly half the length of the second. Antennæ slender, simple in both sexes. Wings broad, subtrigonate; fore wings hardly angular by the tips of the hind wings. Abdomen not extending beyond the hind wings. Legs slender; fore tibiæ short, subclavate; fore tarsi long; hind tibiæ with four rather long spurs. Wings rather broad, of moderate length.

1. Chrysauge bifasciata.

Aureo-flava; abdomen piceum; alæ nigro marginatæ, anticæ nigro trifasciatæ.

Golden yellow. Antennæ and legs black. Abdomen piceous. Fore wings with three slender black bands; the first very near the base; second and third converging hindward; space between them on the hind border by the tips of the hind wings and about half the breadth of the distance between them in front; a black border round the wing beyond the third band; under side black towards the base and with a single black band. Hind wings with a black border which is broadest at the tips. Length of the body 4—6 lines; of the wings 13—20 lines.

Var. β. Black border of the fore wings widened at the tips; second and third bands broad, hardly converging. Hind wings with the black border occupying one-third of the breadth at the tips.

a. ——— ? Presented by E. Doubleday, Esq.
b, *c*. Brazil. From Mr. Argent's collection.
d. Brazil. From Mr. Stevens' collection.
e. ——— ? From Mr. Milne's collection.

2. Chrysauge Divida.

Nigro-ænea; alæ aureo-flavæ, marginibus apicibusque nigris; anticæ nigro oblique unifasciatæ.

Chrysauge Divida, *Hübn. Verz. Schmett.* ii. *Lep.* iv. *Noct.* iii. *Semigeometræ*, iii. *Anthophilæ*, *C. flavitinctæ*, 2, f. 1—4.

a. Parà. Presented by J. P. G. Smith, Esq.

3. Chrysauge flavilata.

Nigra; alæ flavæ, nigro late marginatæ, anticæ fascia postmedia recta flava.

Phalæna flavilata, *Cram. Pap. Exot.* iv. 112, pl. 348, f, B.
Surinam.

4. Chrysauge chrysomelas.

Nigra, subtus canescens; alæ anticæ vitta basali obliqua pyriformi fasciaque subapicali lunata flavis; posticæ flavæ nigro late marginatæ.

Black, somewhat hoary beneath. Proboscis ferruginous. Fore wings with a yellow stripe which occupies the whole breadth except the border for one-third from the base, and tapers thence along the hind border; between it and the tip there is a yellow semicircular band. Hind wings yellow, with black borders which are very broad at the tips. Length of the body 4 lines; of the wings 12 lines.

a. ——— ?

Group 2. FLAVINIA.

Corpus gracile, sublineare, fere cylindricum, longitudine mediocri. Palpi porrecti, capite breviores, articulus 3us acuminatus, 2o

plus triplo brevior. Antennæ maris late pectinatæ, fœminæ simplices. Abdomen maris alas posticas vix superans, fœminæ brevius. Pedes graciles; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ sat angustæ, longitudine mediocres.

Body slender, of moderate length, nearly linear and cylindrical. Palpi porrect, shorter than the head; third joint acuminated, less than one-third of the length of the second. Antennæ of the male deeply pectinated, of the female simple. Abdomen hardly extending beyond the hind wings in the male, shorter in the female. Legs slender; hind tibiæ with two small apical spurs. Wings of moderate length, rather narrow.

5. Chrysauge Osiris.

Nigra; alæ anticæ vitta brevi lata basali postica fasciaque lata brevi subapicali flavis; posticæ dimidio basali flavæ.

Phalæna Osiris, *Cram. Pap. Exot.* ii. 28, pl. 115, f. E.

Surinam.

6. Chrysauge Isis.

Atra; alæ anticæ vitta postica clavata abbreviata fasciaque obliqua subapicali discali flavis; posticæ flavæ, nigro marginatæ.

Atyria Isis, *Hübn. Samml. Exot. Schmett.* ii. 31, 193, f. 385, 386.

Brazil.

7. Chrysauge approximans.

Nigra, flavo bivittata, subtus albida; alæ anticæ vitta postica abbreviata subfusiformi fasciaque lata obliqua subapicali flavis; posticæ flavæ, nigro marginatæ.

Nearly allied to *C. dichroa*, but has broader wings. Black, with two yellow stripes, whitish beneath. Fore wings with a yellow stripe proceeding from the base along the hind border, convex on the fore side, and terminating obliquely a little beyond the middle; a subelliptical oblique yellow band near the tip. Hind wings yellow with black borders which vary slightly in breadth. Length of the body 5—7 lines; of the wings 16—20 lines.

a. Brazil. From Mr. Stevens' collection.
b. Brazil. Presented by E. Doubleday, Esq.
c. Venezuela. From Mr. Dyson's collection.
d, e. ——— ? From Mr. Milne's collection.
f—g. Brazil.

8. Chrysauge? Eucharis.

Alæ sulphureæ, margine postico lato punctoque medio anticarum fuscis.

Phalæna (Noctua) Eucharis, *Drury*, *App.* iii. *Ill. Exot. Ins.* iii. 31, pl. 22, f. 6.
Callimorpha? Eucharis, *Westw. ed. Drury*, iii. 32, pl. 22, f. 6.
Brazil.

9. Chrysauge postica.

Atra, flavo interrupte bivittata, subtus albida; alæ flavæ, costa fascia apiceque atris; posticæ flavæ atro marginatæ. Var. *β. Abdomen vitta brevi postica dorsali flava.*

Deep black, whitish beneath. Thorax with a short yellow stripe on each side. Abdomen with a short yellow stripe on each side along most of the length. Wings bright yellow. Fore wings with black tips, with an oblique black stripe on each, and with black borders. Hind wings bordered with black behind and about the tips. Length of the body 5—6 lines; of the wings 18—20 lines.

a—e. Venezuela. From Mr. Dyson's collection.
f. ———? Presented by E. Doubleday, Esq.

10. Chrysauge dichroa.

Nigra, flavo bivittata, subtus flava; alæ anticæ vitta basali postica fasciaque obliqua subapicali flavis; posticæ vittis duabus flavis.

Callimorpha dichroa, *Perty*, *Del. Anim. Artic. Bras.* pl. 32, f. 6.

Black, very slender, yellow beneath with a yellow stripe on each side. Fore wings with a yellow stripe slightly widening from the base near the hind border and terminating obliquely in the middle; a short oblique somewhat fusiform band near the tip. Hind wings with two yellow stripes, the fore one much broader than the hind one towards the tip.

Var. β. Body whitish beneath. Stripes of the fore wings hardly widening outward. Stripes of the fore wings parted by a broad space, the hind one interrupted beneath by black streaks.

Var. γ. Yellow. Stripes of the hind wings parted by a narrow line above, and wholly united beneath.

a. Bolivia. Presented by E. Doubleday, Esq.
b. Rio Janeiro. Presented by J. P. G. Smith, Esq.
c. Brazil. From Mr. Argent's collection.
d. ———? Presented by E. Doubleday, Esq.
e. Brazil. From Mr. Milne's collection.
f, g. ———?

11. CHRYSAUGE INTERCEPTA.

Nigra; caput postice et subtus, palpi basi, pectus et venter flava; thorax flavo trivittatus; abdomen flavo univittatum; alæ anticæ vitta basali postica fasciaque obliqua lata brevi discali flavis; posticæ flavæ nigro marginatæ.

Black. Head pale yellow behind and beneath. Palpi pale yellow towards the base. Thorax with three pale yellow stripes. Pectus and abdomen beneath pale yellow. Abdomen with a broad dorsal pale yellow stripe. Legs hoary; fore coxæ yellow. Fore wings black, with a pale yellow stripe extending from the base near the hind border to beyond one-third of the length, and with a very broad short oblong quadrate oblique band in the disk. Hind wings pale yellow with black borders; the yellow hue is darker on the under side. Length of the body 5 lines; of the wings 17 lines.

a. Honduras. From Mr. Dyson's collection.

12. CHRYSAUGE INTENSA.

Atra; alæ croceæ, atro marginatæ; anticæ basi et fere trientæ apicali atris.

Deep black. Wings pale saffron-colour. Fore wings black at the base, with a black costal border which is very narrow in the middle and with the apical third part black. Hind wings with a rather broad black border round the tips and along the hind margin. Length of the body 4½—5 lines; of the wings 15—16 lines.

a—e. Venezuela. From Mr. Dyson's collection.

13. CHRYSAUGE MYRRHA.

Ochracea; abdominis vitta et apex nigra; alæ nigro marginatæ, anticæ fascia subapicali nigra.

Phalæna (Geometra) Myrrha, *Cram. Pap. Exot.* i. 47, pl. 29. f. G.
Ephestris Myrrha, *Hübn. Verz. Schmett.* 178, 1840.
Surinam.

14. CHRYSAUGE SIMULANS.

Nigra; subtus albida; vertex albus; thorax albo biguttatus; humeri flavi aut lutei; abdomen albido bivittatum; alæ discis anticæque macula subapicali flavis aut luteis, subtus albido strigatæ.

Black, whitish beneath. Head white above. Thorax with two white dots close together in front, and a yellow spot on each side. Abdomen with a whitish stripe on each side. Wings with a very large yellow spot in each disk, nearly triangular and less than two-thirds of the length in the fore wings, irregularly fusiform in the hind wings. Fore wings with a yellow spot near the tip in front; under side with some whitish streaks at the tip. Hind wings whitish beneath, with three large irregular brown spots, one in front, another behind, and the third at the tip. Length of the body 4—4½ lines; of the wings 11—12 lines.

Var. β. Humeral spots, disks and spots of the wings luteous.

a. Venezuela. From Mr. Dyson's collection.
b, c. ——— ?

15. CHRYSAUGE ERYCINOIDES.

Mas. *Atra, subtus albida; alæ anticæ vitta basali postica rufa, maculaque subapicali limpida, subtus pallidiores maculis guttisque nonnullis albidis; posticæ subtus pallide luteæ, apices versus nigro-fuscæ luteo variæ.* Fœm. *Atra; alæ anticæ vitta basali postica rufa maculisque duabus subapicalibus limpidis; posticæ vitta discali rufa, subtus obscure testaceæ fusco venosæ.*

Black, whitish beneath. Proboscis white. Fore wings with a red stripe which proceeds from the base along half the length near the hind border, and with a limpid spot near the costa and towards the tip. Legs mostly white. *Male.* Fore wings with some yellow spots and dots towards the tips beneath. Hind wings red with broad black borders; under side gilded yellow with black veins, black with yellow marks towards the tips and along the hind borders. *Fem.* Fore wings with two limpid spots near the tip, the second behind the first and a little nearer the tip; under side brown towards

the tip. Hind wings with a broad discal red stripe; under side dark testaceous with brown veins. Length of the body 4½—5½ lines; of the wings 16—18 lines.

a, b. Rio Janeiro. From Mr. Stevens' collection.
c, d. ——— ? From Mr. Children's collection.

16. Chrysauge subalba.

Nigro-fusca; corpus, palpi et pedes subtus alba; thorax luteo bimaculatus; alæ anticæ luteæ venosæ, basi subtus albæ; posticæ subtus albæ apice nigro-fuscæ.

Brownish black. Palpi, body and legs white beneath. Proboscis and antennæ black. Palpi luteous at the base. Thorax with a luteous spot on each side. Fore wings with luteous veins above, white at the base beneath. Hind wings white beneath except towards the tips. Length of the body 3½ lines; of the wings 10 lines.

a. Venezuela. From Mr. Dyson's collection.

17. Chrysauge bupaloides.

Nigra; corpus albo-tomentosum; alæ anticæ fascia lata brevi postica maculaque antica albis semihyalinis; posticæ dimidio basali albo, subtus albæ nitentes venis nigris.

Male. Black. Body and legs clothed with white hairs or tomentum. Proboscis tawny. Wings black. Fore wings with a broad white semihyaline stripe extending from the base very near the hind border to less than half the length, and with a small round white semihyaline spot beyond the middle and near the fore border; under side white and shining towards the tips. Hind wings white for nearly half the length from the base, the outline of the white part forms a somewhat rounded angle in the middle; under side shining white with black veins. Length of the body 4½—5 lines; of the wings 14—15 lines.

a—c. Bolivia. From Mr. Bridges' collection.

18. Chrysauge subvaria.

Nigra; corpus subtus albo-tomentosum; alæ anticæ vitta basali alba, subtus apicæ canæ; posticæ dimidio basali albo, apicali subtus cinereo.

Male. Black, clothed with white hairs and tomentum beneath and on each side above. Proboscis tawny. Wings black. Fore wings with an irregular broad white stripe extending from the middle of the base to less than half the length, more clearly defined beneath where the tips of the wings are hoary. Hind wings white for half the length from the base, the outline of the white part hardly angular; black part gray beneath. Length of the body 5 lines; of the wings 14 lines.

a. Bolivia. From Mr. Bridges' collection.

19. Chrysauge repanda.

Aurantiaca; corpus subtus albidum; antennæ nigræ; alæ anticæ apices versus nigræ maculis tribus albis; posticæ maculis marginalibus nigris strigisque subtus discalibus flavis.

Bright orange. Head in front, body beneath and legs whitish. Palpi black, white beneath; third joint acuminated, more than half the length of the second. Antennæ black, rather deeply pectinated. Fore wings black for more than one-third of the length from the tips, and including an interrupted white band composed of three spots. Hind wings with black streaks along the borders, and on the under side with a few pale yellow streaks over the whole surface. Length of the body 6½ lines; of the wings 21 lines.

a, *b*. Bolivia. From Mr. Bridges' collection.

20. Chrysauge Dimas.

Albida; caput, thorax anticus et alæ posticæ rufa; alæ anticæ costa rufa, fascia media maculari valde obliqua nigra.

Phalæna Dimas, *Cram. Pap. Exot.* i. 91, pl. 59, f. C.
Trosia Dimas, *Hübn. Verz. Schmett.* 196, 2009.

West Indies.

21. Chrysauge Bracteola.

Nigra, subtus albida; thorax luteo binotatus; alæ anticæ macula una discali supera duabusque inferis luteis; posticæ vitta antica lutea.

Phæochlæna Bracteola (Phalæna vera, Callimorpha variegata), *Geyer, Samml. Exot. Schmett.* iv. 17, 328, f. 655, 656.

Black. Body, palpi and legs whitish beneath. Head luteous beneath. Thorax with a luteous mark on each side. Fore wings with an oblique elliptical luteous spot in the disk near the fore border; under side with a short luteous stripe proceeding from the base and with two luteous spots, the second near the tip. Hind wings with a luteous stripe occupying nearly one-third of the breadth from the fore border. Length of the body $4\frac{1}{2}$ lines; of the wings 12 lines.

a. ———?

Group 3. SCAPTIA.

Corpus longum, gracile, cylindricum, sublineare. Palpi capite paullo longiores; articulus 3us minimus. Antennæ *maris* late pectinatæ, *fœminæ* subpectinatæ. Abdomen alas posticas superans. Pedes graciles; tibiæ posticæ quadricalcaratæ. Alæ mediocres.

Body long, slender, cylindrical, nearly linear. Palpi a little longer than the head; third joint very minute, not more than one-tenth of the length of the second. Antennæ of the male deeply pectinated, of the female minutely pectinated. Abdomen extending for about one-fourth of its length beyond the hind wings. Legs slender; hind tibiæ with four spurs of moderate length. Wings yellow and black, of moderate length and breadth.

22. Chrysauge Antholia.

Mas. *Nigra, flavo univittata, subtus albida; alæ anticæ vitta angusta brevi postica fasciaque obliqua latissima flavis; posticæ flavæ, nigro marginatæ.*

Black, with a yellow stripe, whitish beneath. Fore wings with a slender yellow stripe which extends from the base near the hind border along less than half the length, beyond which there is a very broad oblique yellow band which does not extend to the borders. Hind wings yellow with a black border which is broadest in front of the tip. Length of the body 8 lines; of the wings 18 lines.

a. Nicaragua. Presented by the Paris Museum.

23. Chrysauge pyraloides.

Nigra, luteo-flavo trivittata, subtus albida; alæ anticæ vitta brevi postica subfusiformi fasciaque lata brevi subobliqua luteo-flavis; posticæ luteo-flavæ, margine latissimo nigro.

Black, with three luteous yellow stripes, whitish beneath. Fore wings with a luteous yellow stripe parallel to the hind border from the base and but little more than half the length of the wing, very obtusely angular in front; its outer side nearly parallel to the luteous yellow oblique band which does not extend to the hind border. Hind wings luteous yellow with a very broad black border. Length of the body 8 lines; of the wings 18 lines.

a, *b*. ——— ? Presented by E. Doubleday, Esq.

Group 4. MICROPUS.

Corpus gracile, cylindricum, sublineare, *maris* longum, *fœminæ* mediocre. Palpi capite vix breviores; articulus 3us minimus. Antennæ *maris* late pectinatæ, *fœminæ* subpectinatæ. Abdomen *maris* alas posticas superans, *fœminæ* brevius. Pedes graciles; tibiæ posticæ calcaribus duobus parvis apicalibus, *fœminæ* late ciliatæ. Alæ mediocres.

Micropus, *Hübn. Samml. Exot. Schmett.* i. 24, 66.

Body slender, cylindrical, nearly linear, longer in the male, of moderate length in the female. Palpi nearly as long as the head; third joint very minute, not more than one-tenth of the length of the second. Antennæ of the male deeply pectinated, of the female very minutely pectinated. Abdomen extending for about one-fourth of its length beyond the hind wings in the male, not extending so far as the hind wings in the female. Legs slender; hind tibiæ with two small apical spurs, deeply ciliated in the female. Wings of moderate length and breadth. This group connects the *Lithosiidæ* with the *Pyralides*.

24. CHRYSAUGE LONGALIS.

Mas. *Luteo-flava, subtus albida; caput et thorax antice nigra; abdomen apice supra fuscum; alæ margine anticaque plus triente apicali nigris.*

Micropus longalis (Pyralis difformis Idia monstrosa), *Hübn. Samml. Exot. Schmett.* i. 24, 66, f. 131, 132.

Luteous yellow, whitish beneath. Thorax in front and head black above. Abdomen brown above at the tip. Fore wings black for more than one-third of the length from the tip, and bordered with black in front. Hind wings bordered with black behind and at the tips. Length of the body 7 lines; of the wings 18 lines.

Fœm. *Læte luteo-flava; caput, thorax et abdomen apice nigra; alæ margine late atro intus dentato antice apud medium dilatato.*

Bright luteous yellow. Head, palpi, proboscis, antennæ, thorax except the hind part and tip of the abdomen black. Head clothed with white hairs about the eyes beneath. Palpi white beneath. Legs mostly covered with yellow down; hind tibiæ deeply fringed with yellow hairs which equal them in length. Wings with a broad black border which is serrated on the inner side except in front of the fore wings, where it forms two slight curves and is dilated in a subquadrate form between them; veins cinereous towards the borders. Length of the body 6½ lines; of the wings 20 lines.

a—c. Parà. From Mr. Bates' collection.
d. ——— ? From Mr. Milne's collection.

Genus 28. SCAPTESYLE.

Mas. Corpus sat longum et robustum, sublineare, fere cylindricum. Palpi ascendentes, capite multo breviores; articulus 3us minimus. Antennæ graciles, subsetosæ. Abdomen apice fasciculatum. Pedes sat validi; tibiæ posticæ calcaribus quatuor sat longis. Alæ sat latæ.

Male. Body nearly linear and cylindrical, of moderate length and stoutness. Palpi ascending, much shorter than the head; third joint very minute. Antennæ slender, minutely bristly. Abdomen tufted at the tip. Legs moderately stout; hind tibiæ with four rather long spurs. Wings moderately broad. Allied to the *Geometrides*.

1. Scaptesyle tricolor.

Nigra; palpi apice subtus albi; thorax margine lateribusque anticis luteis; abdomen fasciis ventralibus apiceque albis; pedes albo annulati; alæ luteæ, anticæ triente apicali rubro nigro marginato; posticæ apice nigræ.

Black. Palpi white beneath towards the tips. Thorax pale luteous in front and along the fore part of each side. Abdomen white at the tip; ventral segments with white bands. Femora, tibiæ and tarsi with broad white bands. Wings pale luteous. Fore wings black at the base; their apical third parts deep red bordered with black. Hind wings with black tips. Length of the body 4½ lines; of the wings 13 lines.

a, b. Silhet. From Mr. Argent's collection.

Genus 29. MENNIS.

Mas. Corpus longum, gracillimum, sublineare, fere cylindricum. Palpi porrecti, capite multo breviores; articulus 3us minutus, acuminatus, 2o quadruplo brevior. Antennæ graciles, subsetosæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ sat angustæ.

Male. Body long, nearly linear and cylindrical, very slender. Palpi porrect, much shorter than the head; third joint minute, acuminated, not more than one-fourth of the length of the second. Antennæ slender, very slightly bristly, not more than half the length of the body. Abdomen extending for about one-fourth of its length beyond the hind wings. Legs slender; hind tibiæ with four small spurs. Wings orange and black, rather narrow.

1. MENNIS ORISLINEA.

Aurantiaca, subtus alba; palpi, proboscis et antennæ nigra; abdomen apice albo-pilosum; alæ apices versus posticeque angulatim nigræ.

Orange. Body and legs white beneath. Palpi, proboscis and antennæ black. Abdomen with white hairs at the tip. Wings black towards the tips and along the hind border of the hind wings; the outline of the orange part resembles the profile of a human face, and is excavated in front and behind in each of the four wings. Length of the body 6 lines; of the wings 12 lines.

a. Santa Fé de Bogota. From Mr. H. Stevens' collection.

2. MENNIS BIMACULA.

Nigra, nigro-hirta; alæ rufæ, marginibus apicibusque rufis, anticæ nigro bimaculatæ.

Nearly allied to *M. orislinea*, but the markings of the wings are different, and the body is clothed with black hairs, not with red hairs. Black. Wings red, with black borders and tips. Fore wings with two black spots; one open to the black border in front of the second, which is in the disk. Length of the body 5 lines; of the wings 10—11 lines.

a. Santa Fé de Bogota. From Mr. Isaacson's collection.
b. ———? Presented by E. Doubleday, Esq.

Genus 30. EUDULE.

Corpus gracile, sublineare, fere cylindricum, sat longum. Palpi porrecti, capite paullo breviores; articulus 3us conicus, 2o quadruplo brevior. Antennæ *maris* subpectinatæ, *fœminæ* serratæ. Abdomen alas posticas plerumque superans. Pedes graciles; tibiæ posticæ quadricalcaratæ. Alæ longæ, angustæ; anticæ venis quatuor inferioribus.

Eudule, *Hübn. Samml. Exot. Schmett.* ii. 14, 127.

Body slender, nearly linear and cylindrical, rather long. Palpi porrect, rather shorter than the head; third joint conical, not more than one-fourth of the length of the second. Antennæ of the male minutely pectinated, of the female serrated. Abdomen generally extending beyond the hind wings. Legs slender; hind tibiæ with four spurs of moderate length. Wings long and narrow; fore wings with four inferior veins.

1. EUDULE VARIEGATA.

Coccinea; caput nigrum, albo varium; abdomen nigrum, albo fasciatum; alæ anticæ basim versus nigro venosæ, apices versus nigro bifasciatæ et albo guttatæ; posticæ nigro venosæ, margine lato nigro albo guttato.

Crimson. Head black, white about the eyes and with white dots above. Antennæ, proboscis and palpi black, the latter white beneath, their third joint about one-fourth of the length of the second. Abdomen black, with a white band which is widest beneath on each segment, extending for nearly half its length beyond the hind wings in the male, much shorter in the female. Legs black, white beneath. Fore wings with black-bordered veins towards the base, in the middle with a black oblique band which does not extend towards the fore border, but is dilated and contains a white dot towards the hind border; apical fourth part black with three or four white dots in a transverse line. Hind wings veined with black, and with broad white-dotted black borders. *Male.* Hind wings black, streaked with white beneath. Length of the body 4—5 lines; of the wings 12—14 lines.

a, *b*. Jamaica. From Mr. Gosse's collection.
c, *d*. ———? From Mr. Milne's collection.

2. Eudule bipennis.

Fœm. *Luteo-rufa; caput albo varium; palpi nigri, subtus albi; antennæ nigræ; thorax nigro alboque vittatus et antice fasciatus; abdomen nigro vittatum, apice albo varium; pedes nigri, subtus albi; alæ anticæ apices versus aut fere omnino albidæ nigro venosæ.*

Fem. Luteous red. Head black, white about the eyes and about the peristoma. Palpi black, white beneath; third joint less than one-fourth of the length of the second. Proboscis and antennæ black. Thorax with one black and two white stripes, and in front with a black and a white band. Abdomen extending for one-fourth of its length beyond the hind wings, with a black dorsal stripe; segments towards the tip with white hind borders. Legs black, white beneath. Fore wings towards the tips whitish hyaline with black clouded veins, except in a small part of the disk towards the tips where the veins are whitish and not bordered. Hind wings with black tips. Length of the body 5½—6 lines; of the wings 13—15 lines.

Var. β. Fore wings above almost wholly whitish and black-veined.

a. Honduras. From Mr. Dyson's collection.
b. Venezuela. From Mr. Dyson's collection.
c. ———?

3. Eudule pulchricolora.

Fœm. *Aurantiaca; caput supra, palpi apice et antennæ nigra; alæ anticæ gutta costali ante medium et triente apicali nigris, hac fascia obliqua abbreviata albido-hyalina; posticæ gutta postica apiceque nigris.*

Eudule pulchricolora (Phalæna vera Hypocrita Sphingiformis), *Hübn. Samml. Exot. Schmett.* ii. 14, 127, f. 253, 254.

Fem. Bright orange colour. Head black above. Palpi black towards the tips. Antennæ black. Proboscis testaceous. Prothorax with a black ridge. Fore wings with a black costal dot before one-third of the length, and with one-third of the length from the tips black and including an oblong oblique whitish hyaline spot. Hind wings with black tips and with a black dot on the middle of the hind border, hardly extending beyond the hind wings. Length of the body 3 lines; of the wings 9 lines.

a. Brazil. From Mr. Argent's collection.
b. Parà. Presented by J. P. G. Smith, Esq.
c. Parà. From Mr. Bates' collection.

Genus 31. BARBICORNIS.

Corpus gracile, sat breve. Palpi capite multo breviores; articulus 3us conicus, minimus, 2o quadruplo brevior. Antennæ filiformes subpilosæ, corpore vix breviores. Abdomen alarum margines posticas non attingens. Pedes graciles; calcaribus nullis. Alæ anticæ sat angustæ; posticæ caudis duabus longis instructæ.

Barbicornis, *Godart, Encycl. Méth.* ix. 706; *Westw.; Blanchard.*

Body slender, rather short. Palpi much shorter than the head; third joint conical, very small, not more than one-fourth of the length of the second. Antennæ filiform, somewhat hairy, nearly as long as the body. Abdomen not extending to the hind borders of the hind wings. Legs slender, without spurs. Fore wings rather narrow. Hind wings with two long tails. Allied to the *Rhopalocera*.

1. Barbicornis basilis.

Mas. *Atra; alæ anticæ fasciis duabus obliquis latis aurantiacis; posticæ vitta basali et nonnunquam gutta postica aurantiacis.* Fœm. *Alæ anticæ nonnunquam fascia unica aurantiaca, posticæ immaculatæ.*

Barbicornis basilis, *Godart, Enc. Méth.* ix. 706, 1. *Griff. Anim. Kingd.* pl. 102, f. 3. *Boisd. Sp. Gén. Lép.* pl. 20, f. 3. *Crochard, ed. Règne Anim. Atlas, Ins.* pl. 143, f. 4. *Westw. Gen. Diurnal Lep.* ii. 425.

The bands of the fore wings vary in breadth and form, and the basal one is more or less attenuated hindward, and the hind dot of the hind wings is sometimes wanting.

a—f. ———? From Mr. Children's collection.
g, h. Brazil. From Mr. Stevens' collection.

2. Barbicornis Mona.

Nigra; alæ anticæ fascia obliqua subarcuata postmedia maculaque postica, posticæ vitta lata postica, luteis.

Barbicornis Mona, *Hewitson, MSS.; Westw. Gen. Diurn. Lep.* ii. 425, 2, pl. 70, f. 2.

———?

Genus 32. THYMARA.

Antennæ sat longæ, setis appressis extus vestitæ, ramis longis scite setosis bipectinatæ. Oculi magni, extantes. Alæ anticæ trigonæ. Alæ posticæ subtrigonæ, longissime caudatæ; angulus analis dentatus. Tibiæ omnes simplices? Abdomen breve, pilis longis vestitum.

Thymara, *Doubleday, Zoologist*, i. 197.

"Costal vein of the fore wings straight, attaining the costa considerably beyond the middle; subcostal nearly parallel with the costal vein, bent downwards beyond the middle, so as partly to close the discal areolet, from which portion two veinlets are thrown off to the outer margin, whilst the third proceeds in a direct course to the costa just before the apex; median vein four-branched, the veinlets attaining the outer margin at about equal distances; discal areolet divided longitudinally by a false vein, which bifurcates at its extremity, one fork striking the disco-cellular curve of the subcostal, the other the median vein above and beyond the point where the second veinlet from the base is thrown off, thus closing the discal areolet; radial vein replaced by a very faint false vein. Costal vein of the hind wings wanting; subcostal slightly curving outwards, terminating in the tail, emitting one veinlet to the anterior margin, just before the outer angle, another to the outer margin a little before the tail; median vein slightly curved, terminating in the tail, emitting a veinlet to the anal angle; between these two veins is a false vein or fold, which runs directly along the middle of the wing from the base to the tail, where it appears to unite with the median vein."

1. Thymara Zaida.

Aurantiaca; antennæ nigræ; alæ anticæ diaphanæ, venis costa margine externo ciliaque fuscis, disco et margine interno aurantiacis; alæ posticæ maculis duabus magnis nigris, una anali, altera externa, caudis nigris albo terminatis.

Thymara Zaida, *Doubleday, Zoologist*, i. 198, fig.

a. Northern India. From Mr. L. James' collection.

Genus 33. HIMANTOPTERUS.

Antennæ filiformes, dentium serie simplici intus serratæ. Alæ posticæ longissimæ, lineares. Proboscis et palpi nulla.

Himantopterus, *Wesmael, Bull. Acad. Roy. Sci. Brux.* iii. 162.

1. Himantopterus fuscinervis.

Rufescens; alæ anticæ testaceæ, harum venæ et alæ posticæ fuscæ.

Himantopterus fuscinervis, *Wesmael, Bull. Acad. Roy. Sci. Brux.* iii. 163, pl. 6, f. 1. *Doubleday, Zoologist*, i. 198, fig.

Genus 34. SANGALA.

Corpus gracile, sublineare, sat longum. Palpi porrecti, capite breviores; articulus 3us acuminatus, 2i dimidio vix brevior. Antennæ graciles, *maris* subpectinatæ, *fœminæ* serratæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ quadricalcaratæ. Alæ latæ, venis tribus inferioribus.

Resembles the *Rhopalocera*. Body slender, rather long, nearly linear. Palpi porrect, shorter than the head; third joint acuminated, nearly half the length of the second. Antennæ slender, of the male minutely pectinated, of the female serrated. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four spurs of moderate length. Wings broad; three inferior veins.

1. Sangala gloriosa.

Nigra; abdomen nigro-cyaneum; alæ cyaneo aut viridi micantes macula magna transversa oblonga subapicali coccinea.

Black. Abdomen bluish black. Wings with bright deep blue or green reflections. Fore wings with a large transverse oblong crimson spot near each tip. Length of the body 7 lines; of the wings 20 lines.

a. Santa Fé de Bogota. From Mr. Isaacson's collection.
b. ———? Presented by E. Doubleday, Esq.

2. Sangala cælisigna.

Atra; proboscis testacea; thorax anticus rufo bimaculatus; pedes cinerei; alæ macula magna nitida discali cyanea; posticæ macula basali rufa.

Deep black. Proboscis testaceous. Thorax with a red spot on each side in front. Legs gray. Wings with a deep blue discal spot which is largest and most brilliant in the fore wings; under

side blackish blue. Hind wings with a red spot on each at the base. Length of the body 5 lines; of the wings 13 lines.

a. Santa Fé de Bogota.

Genus 35. NELO.

Corpus gracillimum, sublineare, longitudine mediocri. Palpi porrecti, capite breviores; articulus 3us conicus, minimus, 2o plus quadruplo brevior. Antennæ late et dense pectinatæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus duobus mediis, apicalibus nullis. Alæ latæ, non longæ.

Chrysophila? *Hübn.*
Ctimene? *Boisd.*

Male. Body very slender, nearly linear, of moderate length. Palpi porrect, shorter than the head; third joint conical, very small, less than one-fourth of the length of the second. Antennæ deeply and closely pectinated. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ with two middle but no apical spurs. Wings broad, not long, black and red.

1. NELO DISCALIS.

Nigra; thorax anticus rufo bimaculatus; pectus album; abdomen maculis lateralibus rufis; alæ subtus cinereæ, anticæ cyanescentes, disco plus minusve rufo.

Black. Thorax with a red spot on each side in front. Pectus white. Abdomen with a row of red spots along each side. Wings beneath gray with darker veins. Fore wings tinged with blue, and with a very large deep red spot which occupies from one-third to two-thirds of the disk. Length of the body 5—6 lines; of the wings 11—14 lines.

a—d. Bolivia. From Mr. Bridges' collection.

2. NELO? AURISCUTALIS.

Fœm. *Nigra; thorax cyanescens; alæ cyaneo marginatæ; anticæ aurantiacæ, basi apiceque nigræ.*

Chrysophila auriscutalis (Pyralis vulgaris, Palpita unicoloris), *Hübn. Samml. Exot. Schmett.* iii. 20, 233, f. 465, 466.

Rio Janeiro.

3. NELO? XANTHOMELAS.

Alæ nigræ, basi late aurantiaca; anticæ macula subapicali aurantiaca.

Ctimene xanthomelas, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 202, pl. 3, f. 10.

? Port Praslin, New Ireland.

Genus 36. PSYCHOMORPHA.

"Corpus gracile, apice pilosum. Palpi graciles, subporrecti, pilosi. Proboscis mediocriter longa. Antennæ *maris* breviter pectinatæ, *fœminæ* simplices. Abdomen alas posticas non superans. Pedes pilosi; tibiæ posticæ breviter calcaratæ. Alæ latæ, non longæ."

Glaucopis (Psychomorpha), *Harris, Descript. Cat. N. Amer. Sphin.* (*Amer. Jour. Sci. and Arts*, xxxvi. 2,) 39.

This genus has some resemblance to *Anarta* and to the *Erycinidæ*.

"Antennæ in the male pectinated on both sides, the pectinations rather short, simple in the female. Proboscis moderate, spirally rolled. Palpi slender, nearly horizontal, extending a little beyond the clypeus, covered with loose hairs so as to conceal the joints. Wings short, somewhat triangular, with the outer margins rounded; discal areolet of the hind wings short, closed by a sinuous vein. Body slender, hairy at the tip. Legs short, hairy; spurs of the hind tibiæ three, slender, nearly concealed by the hairs."

1. PSYCHOMORPHA EPIMENIS.

Alæ nigræ, subtus cyaneo marginatæ; anticæ macula magna pone medium albida; posticæ basi nigræ apice fulvæ margine atro.

Phalæna (Noctua) Epimenis, *Drury, App.* iii. *Ill. Exot. Ins.* iii. 39, pl. 29, f. 2.

Callimorpha Epimenis, *Westw. ed. Drury*, iii. 40, pl. 29, f. 2.

Psychomorpha maculata, *Harris, Cat.*

Glaucopis (Psychomorpha) Epimenis, *Harris, Descript. Cat. N. Amer. Sphin.* (*Amer. Journ. Sci. and Arts*, xxxvi. 2,) 39, 6.

a. United States. Presented by the Entomological Club.

Genus 37. MELANCHROIA.

Corpus gracile, sublineare, fere cylindricum, longitudine mediocri. Palpi porrecti, pilosi, capite breviores; articulus 3us conicus, 2i dimidio vix brevior. Antennæ maris pectinatæ, fœminæ subpectinatæ. Abdomen alarum margines posticos non attingens. Pedes graciles; tibiæ posticæ quadricalcaratæ. Alæ latæ, non longæ, sæpissime nigræ, maculis semihyalinis albis.

Melanchroia, *Hübn. Verz. Schmett.* 173.
Eudmoe, *Hübn. Verz. Schmett.* 173.

Body slender, of moderate length, nearly linear and cylindrical. Palpi porrect, hairy, shorter than the head; third joint conical, nearly half the length of the second. Antennæ closely pectinated; branches long or of moderate length in the male, very short in the female. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ with four spurs. Wings broad, not long, generally black with semihyaline white spots.

Div. 1. Spurs short, near together.

1. Melanchroia geometroides.

Nigra; caput, thorax, pectus et abdomen apice luteo-hirta; palpi basi testacei; alæ pone margines strigis nonnunquam obsoletis albis.

Black. Head, thorax, pectus, and tip of the abdomen beneath clothed with luteous hairs. Palpi testaceous towards the base. Proboscis ferruginous. Wings with whitish streaks between the areolets towards the borders, these are most apparent in the fore wings and are sometimes obsolete. Length of the body 4—5 lines; of the wings 13—15 lines.

a, *b*. Java. From Mr. Gould's collection.

2. Melanchroia Cephise.

Atra; caput, prothorax, thoracis latera antica, pectus et abdomen apice lutea; palpi pedesque subtus albidi; abdominis segmenta marginibus posticis subtus albidis; alæ quatuor apicibus ciliisque albis, anticæ cano venosæ.

Phalæna Geometra Chephise, *Cram. Pap. Exot.* iv. 182, pl. 381, f. E.

Melanchroia Cephise, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* ii. *Phal.* ii. *Veræ* vii. *Hypocritæ A. Sphingiformes*, 17, f. 1—4; *Verz. Schmett.* 175, 1789.

Deep black. Head, prothorax, sides of the thorax in front, and breast clothed with luteous hairs. Palpi, legs and hind borders of the abdominal segments whitish beneath. Wings fringed with white, and with an elliptical white spot on each tip; veins somewhat cinereous. Length of the body 5 lines; of the wings 18 lines.

Surinam.

a. Mexico. Presented by Dr. Pablo Martinez del Rio.
b, *c*. Jamaica. From Mr. Gosse's collection.
d. Venezuela. From Mr. Dyson's collection.
e. South America. From Mr. Warwick's collection.
f—*l*. Honduras. From Mr. Miller's collection.

3. Melanchroia? fulvilumbis.

Fœm. *Nigra, subtus alba; abdominis latera fulva; alæ apice albæ; posticæ subtus anticæque vittis cyaneis.*

Melanchroia fulvilumbis (Phalæna vera, Callimorpha sphingiformis), *Geyer, Samml. Exot. Schmett.* iv. 21, f. 679, 680.

East Indies.

4. Melanchroia Arne.

Nigro-fusca; abdomen rufum; alæ anticæ vittis strigisque pallidioribus, posticæ apice albæ.

Phalæna Arné, *Cram. Pap. Exot.* i. 23, pl. 15, f. E.
Eudmoe delumbis, *Hübn. Verz. Schmett.* 173, 1787.

Surinam.

5. Melanchroia? Pellex.

Fusca; abdomen album, apice rufum; alæ anticæ lineis tribus maculaque transversa albis; posticæ albæ margine fusco albo tripunctato.

Phalæna Noctua Pellex, *Linn. Mus. Lud. Ulr.* 388; *Syst. Nat. ed.* 12, 838, 104; *Gmel. ed. Syst. Nat.* i. 5, 2550, 104.

South America?

6. MELANCHROIA? LEONTIA.

Nigra; alæ testaceo ciliatæ, posticæ apice albæ.

Phalæna Bombyx Leontia, *Stoll, Pap. Exot.* v. 155, pl. 34, f. 6.
Brazil.

7. MELANCHROIA? INCONSTANS.

Mas. *Nigra; thorax luteo maculatus; alæ cyaneo-nigræ, subtus basi luteæ aut rufæ; anticæ albo marginatæ.*

Melanchroia inconstans (Phalæna vera, Hipocrita sphingiformis), *Geyer, Samml. Exot. Schmett.* v. 17, 431, f. 861, 862.
Mexico.

Div. 2. Spurs long, not near together.

8. MELANCHROIA PYLOTIS.

Nigra; prothorax luteus; abdomen apice testaceum; alæ apice albo ciliatæ, anticæ macula subrotunda antica discali albo-hyalina.

Zygæna Pylotis, *Fabr. Mant. Ins.* ii. 106, 47; *Ent. Syst.* iii. 1, 400, 49.
Sphinx Zygæna Pylotis, *Gmel. ed. Syst. Nat.* i. 5, 2397, 142.
Phalæna Aterea, *Cram. Pap. Exot.* iv. 158, pl. 370, f. F.
Melanchroia Aterea, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Vereæ* vii. *Hypocritæ A. Sphingiformes*, 17, f. 1—4.
Surinam.

Black. Prothorax luteous. Abdomen testaceous at the tip. Wings with a white fringe at their tips. Fore wings with a nearly round white hyaline spot in the disk beyond the middle and near the fore border. Length of the body 4 lines; of the wings 13 lines.

a. Parà. Presented by Gordon Graham, Esq.
b, *c*. Venezuela. From Mr. Dyson's collection.
d, *e*. ——— ? Presented by E. Doubleday, Esq.
f. Brazil. From Mr. Stevens' collection.
g. Amazon Region. From Mr. Bates' collection.

9. Melanchroia tepens.

Fusco-nigra ; palpi pedesque subtus albidi ; prothorax et abdomen apice luteo-hirta ; alæ flavo ciliatæ, anticæ macula antica discali subquadrata flava.

Melanchroia Aterea, var. (Phalæna vera, Hipocrita sphingiformis) *Hübn. Samml. Exot. Schmett.* iii. 40, 297, f. 593, 594.

Brownish black. Palpi testaceous towards the base, whitish beneath. Proboscis ferruginous. Prothorax and tip of the abdomen clothed with luteous hairs. Legs whitish beneath. Wings with a testaceous fringe which is broadest in the hind pair; veins mostly testaceous. Fore wings with an oblique transverse subquadrate testaceous spot near the fore border and beyond the middle. Hind wings with a small discal mark which is most apparent beneath. Length of the body 4½ lines; of the wings 13 lines.

a. Parà. Presented by Mrs. C. Parker.

10. Melanchroia subcana.

Niger ; corpus canescens ; palpi pedesque subtus albidi ; alæ subtus canescentes, anticæ maris *macula,* fœminæ *fascia brevi lata media vix obliqua alba.*

Black. Body with a hoary tinge, whitish beneath. Palpi towards the base and proboscis testaceous. Wings with a whitish fringe; under side with a hoary tinge. Fore wings of the male with a large white spot near the fore border, and beyond the middle;—of the female, with a short broad nearly upright discal white band traversed by white veins. Length of the body 5 lines; of the wings 16 lines.

a. South America. From M. Becker's collection.
b. ———? From Mr. Children's collection.

11. Melanchroia clavigera.

Nigra ; palpi pedesque subtus albidi ; abdomen apice luteum ; alæ apice albæ, albo apud discum unimaculatæ ; anticæ macula obliqua elliptica, posticæ macula clavata strigisque subtus albis.

Black. Palpi and legs whitish beneath. Proboscis testaceous. Abdomen luteous at the tip. Wings with a white fringe at the tips

and along part of the hind border of the hind wings. Fore wings with an elliptical oblique spot in the disk. Hind wings with a clavate longitudinal spot in the disk; on the under side this spot is more lengthened, and there are two white stripes towards the inner border. Length of the body 5½ lines; of the wings 16 lines.

a. South America. From M. Becker's collection.
b. Rio Janeiro. From Mr. Johnson's collection.

12. MELANCHROIA ÆRUGINOSA.

Nigro-viridis, subtus albida; abdomen apice luteum; alæ quatuor fusco-cupreæ albo unimaculatæ; posticæ albo bistrigatæ.

Greenish-black, whitish beneath. Proboscis testaceous. Abdomen luteous at the tip. Wings brownish cupreous, disk of each with an oblong oblique white spot which is largest and attenuated towards the base in the hind pair, and the latter have two white streaks between the spot and the inner border. Length of the body 5¼ lines; of the wings 17 lines.

a. Brazil. From Mr. Stevens' collection.

Genus 38. NYCTEMERA.

Corpus sublineare, fere cylindricum, gracile aut sat validum, longitudine mediocri. Palpi porrecti, capite vix breviores; articulus 3us acuminatus, 2i dimidio æqualis. Antennæ *maris* pectinatæ, *fœminæ* subpectinatæ aut serratæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor. Alæ latæ albæ, nigro fuscoque variæ.

Nyctemera p., et Deilemera, *Hübn. Verz. Schmett.* 178.
Leptosoma, *Boisd.*

Body nearly linear and cylindrical, of moderate length, slender or rather stout. Palpi porrect, almost as long as the head; third joint acuminated, full half the length of the second. Antennæ of the male deeply pectinated, of the female slightly pectinated or serrated. Abdomen not extending beyond the abdomen. Legs slender; hind tibiæ with four spurs of moderate length. Wings broad, not long, black and white; four superior veins.

1. NYCTEMERA ANNULATA.

Abdomen nigrum, annulis aurantiacis; alæ concolores nigræ; anticæ fascia maculari alba; posticæ puncto majori albo.

Leptosoma annulatum, *Boisd. Voy. de l'Astrolabe*, i. 197, 1, pl. 5, f. 9.
Agaglos amicus, *White, Append. Capt. Grey's Journ. Exped. Discov. Austral.* 482.

Antennæ of the female moderately pectinated.

a—*c*. King George's Sound. Presented by the late Earl of Derby.
d. New Holland. Presented by the Entomological Club.
e. New Holland. Presented by J. Hunter, Esq.
f. New Holland. From Mr. Milne's collection.
g, *h*. New Holland. Presented by Capt. Grey.
i. New Holland. From Mr. Children's collection.
j, *k*. New Holland.

2. Nyctemera Doubledayi.

Nigro-fusca; thorax fascia una vittisque duabus luteis; abdomen luteo fasciatum; alæ anticæ gutta basali lutea fasciaque obliqua maculari alba; posticæ macula discali alba.

Leptosoma annulatum, *Doubleday, Dieffenbach's New Zealand*, i. 284, 115.
Nyctemera Doubledayi, *Wing, MSS.*

Brownish black. Palpi clothed with luteous hairs towards the base beneath. Proboscis piceous. Antennæ of the female moderately pectinated. Thorax with a luteous band in front and with two luteous stripes on the disk. Abdomen with a luteous band on each segment; tip luteous. Fore wings with an elongated luteous dot at the base, and with an oblique macular white band beyond the middle, the spots which compose it varying much in size and number. Hind wings with a nearly round white discal spot which also varies much in size. Length of the body 5½—7 lines; of the wings 16—20 lines.

a—*c*. New Zealand. Presented by the Rev. W. Colenso.
d—*o*. New Zealand. Presented by Dr. A. Sinclair.
p. New Zealand. Presented by Capt. Parry.
q, *r*. New Zealand. Presented by Capt. James C. Ross.

3. Nyctemera distincta.

Nigro-fusca; caput testaceo varium; thorax testaceo quadrivittatus; pectus testaceum, nigro maculatum; abdomen fasciis albis, apice testaceo; pedes albidi, fusco vittati; alæ anticæ striga obliqua discali albida; posticæ albæ marginibus latis nigro-fuscis.

Blackish brown. Head testaceous in front, beneath and about the eyes. Palpi testaceous towards the base. Antennæ of the female minutely pectinated. Prothorax with black spots which have testaceous borders. Thorax with two testaceous stripes on each side. Pectus testaceous with black spots. Abdomen with a white band on the hind border of each segment; under side white, with a row of black spots on each side; tip testaceous. Legs whitish, with brown stripes. Fore wings with a more or less indistinct oblique whitish discal streak, which on the under side is enlarged into a distinct white band. Hind wings white, with broad blackish brown borders. Length of the body 5 lines; of the wings 15—16 lines.

a. ———? From Mr. Children's collection.
b, *c*. Java. From Mr. Argent's collection.

4. Nyctemera Evergista.

Lutea; thorax fusco maculatus; abdominis dorsum fuscum, segmentis luteo marginatis; alæ anticæ fuscæ maculis duabus discalibus totidemque apicalibus unaque basali albis; posticæ albæ margine abbreviata et incisa fusca.

Phalæna Geometra Evergista, *Cram. Pap. Exot.* iv. 155, pl. 369, f. E.

Deilemera Evergista, *Hübn. Verz. Schmett.* 179, 1848.

Amboina.

5. Nyctemera Æres.

Thorax flavus, nigro punctatus; alæ anticæ nigræ, basi maculis, fascia media transversa sinuata maculisque duabus apicalibus albis; posticæ albæ margine latiore nigro hastaque alba interrupto.

Leptosoma Æres, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 198, 2.

Bourou. Offack. New Guinea.

6. Nyctemera Agagles.

Thorax flavus nigro punctatus; abdomen annulis apiceque fulvis; alæ anticæ fuscæ macula cuneiformi ad basim, fascia media lata sinuata maculisque duabus apicalibus albis; posticæ albæ margine latiore nigro.

Leptosoma Agagles, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 198, 3.

Offack.

7. Nyctemera famula.

Alæ albæ, dimidio apicali margineque externo nigris; anticæ macula ovali obliqua alba; prothorax fulvus.

——— —— *Drury, Ins. Exot.* ii. 19, pl. 11, f. 3.
Phalæna (Bombyx Spiriling.) Famula, *Drury, App.* ii.
Phalæna Famula, *Cram. Pap. Exot.* iii. pl. 228, f. D.
Nyctemera Famula, *Hubn. Verz. Schmett.* 178, 1845.
Callimorpha? Famula, *Westw. ed. Drury*, ii. 22, pl. 11, f. 3.
Calabar, Bight of Benin.

8. Nyctemera Artemis.

Thorax luteus, nigro punctatus; alæ anticæ nigræ, margine interiore macula elongata ad basim, altera magna discoidea rotundata tribusque apicalibus albis; posticæ albæ margine latiore nigro maculis duabus albis.

Leptosoma Artemis, *Boisd. Voy. l'Astrolabe*, Pt. 1, *Lep.* 199, 4.
Offack. New Guinea.

9. Nyctemera Baulus.

Thorax lineis fulvis; abdomen annulis albis; anus fulvus; alæ anticæ nigræ, fascia submaculari alba; posticæ albæ, margine lato nigra.

Leptosoma Baulus, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 200, 5.
Bourou.

10. Nyctemera trita.

Fusca; palpi nigri, basi testacei; pedes subtus albidi; alæ basim versus cano venosæ; anticæ fascia obliqua discali alba postice abbreviata; posticæ albæ albo venosæ, margine latissimo fusco.

Brown. Antennæ of the female minutely pectinated. Palpi black, testaceous towards the base. Legs whitish beneath, veins of the wings hoary towards the base. Fore wings with a white linear oblique band beyond the middle shortened towards the hind border. Hind wings white and with white veins in the middle, hoary along

the inner border. Length of the body 5 lines; of the wings 16 lines.

a. Java. From the East India Company's collection.

11. Nyctemera apicalis.

Nigro-fusca; caput et thorax albo guttata; abdomen albidum testaceo bivittatum, subtus album e maculis nigris bivittatum, apice testaceum; alæ anticæ fuscæ fascia lata obliqua alba; posticæ albæ, fusco late marginatæ, cilia ex parte alba.

Blackish brown. Head and thorax with white dots. Palpi testaceous, black towards the tips. Proboscis pale tawny. Antennæ black, of the female serrated. Pectus with white spots. testaceous in front and along each side. Abdomen whitish, with a testaceous stripe along each side; under side white, with a row of black dots along each side; tips testaceous. Legs white, with brown stripes. Fore wings brown, with a broad irregular oblique white band which does not extend to the hind border; fringe partly white. Hind wings white with broad brown borders; fringe partly white. Length of the body 6—7 lines; of the wings 20—22 lines.

a, *b*. Ashanti. From the Wesleyan Missionary Society's collection.
c. ——— ? Presented by E. Doubleday, Esq.
d. Zoolu Country, South Africa. Presented by G. F. Angas, Esq.
e. Port Natal. From Mr. Gueinzius' collection.
f. Sierra Leone. Presented by the Rev. D. F. Morgan.
g. Port Natal. From M. Becker's collection.
h. ——— ? From Mr. Milne's collection.
i—*k*. Port Natal. From Mr. Argent's collection.

12. Nyctemera Lacticinia.

Alba; caput et thorax anticus testacea, nigro guttata; palpi nigri basi albidi; antennæ nigræ; thorax nigro trivittatus; abdomen nigro fasciatum, apice testaceum, basi lateribusque ventreque nigro guttatis; pedes nigro vittati; alæ anticæ fuscæ fascia non aut vix obliqua alba, venis basim versus albis; posticæ albæ fusco marginatæ.

Phalæna Geometra Lacticinia, *Cram. Pap. Exot.* ii. 47, pl. 128, f. E.
Nyctemera Lacticinia, *Hübn. Verz. Schmett.* 178, 1847.
Coromandel.

Antennæ of the female minutely pectinated.

a. East Indies. From Mr. Milne's collection.
b, *c*. East Indies. From Mr. Children's collection.
d. Java. From Mr. Henry's collection.

Var. White. Head and thorax in front testaceous, with black spots. Palpi black, testaceous towards the base. Proboscis testaceous. Antennæ black. Thorax with three black stripes. Pectus with black spots. Abdomen with a brown band on each segment and with three brown spots at the base; under side with two rows of black spots on each side; tip testaceous. Legs mostly whitish. Fore wings brown; each with a broad slightly oblique discal white band which does not reach the hind border and is partly divided and subdivided in the middle. Hind wings white, with brown borders which are widened and form an angle on the hind side. Length of the body 5½—6 lines; of the wings 16—18 lines.

a. Malabar Coast. Presented by S. N. Ward, Esq.
b. East Indies. From Mr. Milne's collection.
c. Hong Kong. Presented by J. C. Bowring, Esq.
d. Ceylon. Presented by R. Templeton, Esq.

13. Nyctemera maculata.

Testacea, nigro maculata; pedes nigro vittati; alæ anticæ guttis nigris strigisque albis basalibus, fasciaque obliqua discali alba; posticæ albæ, fusco marginatæ.

Testaceous. Head with a black spot behind and another in front. Palpi towards the tips and antennæ black. Thorax with two black spots in front, one on each side and two in the disk. Abdomen wanting. Legs with black stripes. Fore wings pale brown, with two black dots at the base, by which there are two white streaks, the hind one longer than the fore one; a slightly oblique subfusiform white band rather beyond the middle not extending to the borders; fringe partly white. Hind wings white with brown borders; fringe white, long and testaceous on the inner border. Length of the body 6 lines; of the wings 18 lines.

a. ———? From Mr. Children's collection.

14. Nyctemera tripunctaria.

Alba; caput et thorax antice testacea, nigro guttata; palpi nigri, basi testacei; antennæ nigræ; thorax nigro trivittatus; abdomen dorso lateribusque e guttis nigris vittatum, apice testaceum; pedes nigro striati; alæ anticæ fuscæ, strigis vittaque postica basalibus fasciaque obliqua discali albis; posticæ albæ, fusco marginatæ.

Phalæna tripunctaria, *Linn. Syst. Nat.* (*ed.* 12), 2, 864, 226; *Mus. Lud. Ulr.* 392. (*Edw. Nat. Hist. of Birds*, i. pl. 35. *Seligm. Ois.* i. pl. 69. *Petiv. Gazoph.* pl. 28, f. 8). *Cram. Pap. Exot.* i. 34, pl. 22, f. E. *Fabr. Sp. Ins.* ii. 249, 42; *Mant. Ins.* ii. 191, 62, *Gmel. ed. Syst. Nat.* i. 5, 2469, 226.
Nyctemera atralba, *Hübn. Verz. Schmett.* 178, 1846.

a. ———? From Mr. Children's collection.
b, *c.* Penang. Presented by Sir W. Norris.
d. China. Presented by G. T. Laye, Esq.
e. Assam. From Mr. Warwick's collection.
f. East Indies. From Mr. Milne's collection.

15. Nyctemera latistriga.

Alba; caput et prothorax testacea, nigro maculata; thorax nigro-fusco trivittatus; abdomen fasciis dorsalibus nigro-fuscis, subtus testaceum nigro maculatum; alæ anticæ fuscæ strigis basi fasciaque obliqua discali albis; posticæ albæ fusco marginatæ.

White. Head and prothorax testaceous, with black spots. Palpi testaceous, with black tips. Proboscis tawny. Antennæ black. Thorax with three blackish brown stripes. Pectus testaceous with black spots. Abdomen with a dorsal brown band on each segment; sides, tip and under side testaceous, the latter with two rows of black spots on each side. Legs whitish, with black stripes. Fore wings brown, with some slight white streaks at the base and with one which is much broader and extends from the base near the hind border to half the length of the wing; beyond it there is an oblique white band which does not extend to the hind border and is slightly contracted and divided in the middle. Hind wings white with brown borders which are widened and form an angle on the hind side. Length of the body 5½ lines; of the wings 16 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. Silhet. From the Rev. J. Stainforth's collection.
c. North India. From Mr. L. James' collection.
d. Ceylon. Presented by R. Templeton, Esq.

16. Nyctemera Eleuteria.

Alba ; antennæ nigræ, maris *latissime pectinatæ ; alæ anticæ apice late nigræ.*

Phalæna Bombyx Eleuteria, *Stoll, Suppl. Cram. Pap. Exot.* v. 163, pl. 36, f. 13.

Cape.

17. Nyctemera expandens.

Fusca, subtus albida ; thorax antice subtusque luteus ; alæ anticæ triente basali fasciaque brevi obliqua subapicali albis ; posticæ albæ fusco marginatæ macula apicali alba.

Brown. Head, body beneath and legs with whitish tomentum. Thorax in front and pectus luteous. Palpi testaceous towards the base. Fore wings white except along the fore border for more than one-third of the length from the base; this white part ends very obliquely, and half-way between it and the tip of the wing there is a short oblique white band which is narrower hindward. Hind wings white with brown borders excepting a white apical spot which is broadest beneath, and there the brown hind border is interrupted. Length of the body 6 lines; of the wings 20 lines.

a. ——— ? Presented by E. Doubleday, Esq.

18. Nyctemera perspicua.

Nigra ; caput albo guttatum ; thorax albo quadrivittatus ; abdomen albidum, maculis dorsalibus fuscis, apice testaceum ; alæ anticæ fuscæ vitta postica fasciaque obliqua lata discali albidis ; posticæ albidæ fusco marginatæ.

Black. Head with white dots. Palpi testaceous, with black tips. Proboscis tawny. Antennæ black, serrated in the female. Prothorax with two large white-bordered spots. Thorax with four white stripes. Pectus and coxæ with black dots. Abdomen whitish, with a dorsal row of pale brown spots; tip testaceous; under side white, with a row of black spots along each side. Legs whitish; fore legs occasionally testaceous. Fore wings brown, with a broad irregular oblique discal whitish hyaline band which is almost connected with a white stripe extending from the base near the hind

border. Hind wings whitish hyaline with brown borders. Length of the body 6½—7 lines; of the wings 18—20 lines.

a—e. West Africa. Presented by E. Doubleday, Esq.
f. Sierra Leone. Presented by the Rev. D. F. Morgan.
g, h. ——— ?

19. Nyctemera Coleta.

Alba, fusco guttata; thorax fusco trivittatus; abdomen apice testaceum; alæ anticæ striyis, fascia discali margineque apicali fuscis; posticæ fusco marginatæ.

Phalæna Coleta, *Cram. Pap. Exot.* iv. 153, pl. 368, f. H.
Nyctemera Coleta, *Hübn. Verz. Schmett.* 178, 1844.

White. Head and thorax in front with brown dots. Palpi testaceous towards the base. Proboscis tawny. Antennæ black, serrated in the female. Thorax with three brown stripes. Pectus with brown spots. Abdomen with one dorsal and two lateral rows of brown dots; tip testaceous. Legs mostly white. Fore wings with a broad brown border at the tips, and with an oblique and irregular brown band which is partly more or less connected with the base and with the tips of the wings by means of brown streaks along the veins; fringe partly white. Hind wings with brown borders; veins occasionally more or less bordered with brown; fringe partly white. Length of the body 6—7 lines; of the wings 18—20 lines.

a—c. Ceylon. From the Rev. J. Wenham's collection.
d, e. ——— ? From Mr. Children's collection.
f. Ceylon. Presented by R. Templeton, Esq.

20. Nyctemera selecta.

Testacea, nigro maculata; alæ anticæ fuscæ fasciis quatuor, 1a 2a 4a que macularibus, 3a integra; posticæ albæ fusco marginatæ.

Body testaceous. Palpi and antennæ black, the former white beneath towards the base. Proboscis tawny. Thorax and pectus with black spots. Abdomen with three rows of black spots. Legs mostly white. Fore wings brown, with four white bands, the first and second macular, the third entire and beyond the middle, the fourth composed of two spots and near the tip which has a white dot. Hind wings white with a brown spot in front and brown borders which contain two white spots. Length of the body 6½ lines; of the wings 20 lines.

a. ——— ? Presented by Capt. Sir E. Belcher.

21. Nyctemera interlecta.

Testacea, nigro maculata; abdomen fasciis dorsalibus nigris; alæ albæ; anticæ fasciis tribus incompletis fuscis, 1a basali, 2a maculari media, 3a apicali; posticæ margine maculari fusco.

Body testaceous. Head and thorax with black spots. Palpi and antennæ black, the former white beneath towards the base. Proboscis piceous. Abdomen with black dorsal bands, two rows of black spots on each side, and two beneath. Legs mostly white. Wings white. Fore wings with three imperfect brown bands; the first basal; the second macular, in the middle; the third apical. Hind wings with macular brown borders. Length of the body 6 lines; of the wings 18 lines.

a. Silhet. Presented by E. Doubleday, Esq.

22. Nyctemera plagifera.

Alba, nigro maculata; abdomen apice testaceum; alæ anticæ fasciis duabus macularibus, 1a furcata, strigisque basalibus fuscis; posticæ fasciis duabus incompletis macularibus fuscis.

White. Head, thorax and pectus with black spots. Palpi and antennæ black, the former white beneath towards the base. Antennæ of the female serrated. Abdomen with three rows of black spots above, and with two beneath; tip testaceous. Legs with black streaks. Fore wings with two very irregular macular brown bands; the first forked in front and emitting some streaks to the base; the second apical and containing some white dots. Hind wings with two very incomplete macular bands. Length of the body 6—7 lines; of the wings 20—22 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.
c. Hong Kong. From Mr. Stevens' collection.

23. Nyctemera varians.

Alba, nigro maculata; caput et thorax testacea; alæ anticæ fasciis sex, posticæ duabus fuscis macularibus.

White. Head and thorax testaceous. Antennæ and tips of the palpi black. Proboscis tawny. Antennæ black, of the female serrated. Thorax and pectus with black spots. Abdomen with

three rows of black spots. Tarsi and anterior tibiæ mostly black. Fore wings with six very irregular and incomplete macular brown bands; second, third and fourth connected by a streak in the disk; fifth and sixth partly connected. Hind wings with two macular brown bands. Length of the body 6—7 lines; of the wings 21—24 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.

24. Leptosoma insulare.

Alæ anticæ fusco-cinereæ, fascia alba; posticæ albæ margine fusco; singularum fimbria plagiatim alba; abdomen albidum, linea laterali lutea punctisque nigris.

Leptosoma insulare, *Boisd. Faune Ent. Mad. Bourb. et Maur.* 84, pl. 12, f. 1.

Madagascar, Bourbon, Mauritius.

Genus 39. PTEROTHYSANUS.

Mas. Corpus gracile, breviusculum, sublineare, fere cylindricum. Palpi porrecti, capite fere longiores; articulus 3us minimus. Antennæ simplices. Abdomen alarum margines posticos vix attingens. Pedes sat validi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ latæ, posticæ apud marginem internum longissime ciliatæ; venæ inferiores quatuor.

Male. Body slender, nearly cylindrical and linear, rather short. Palpi porrect, full as long as the head; third joint very small. Antennæ simple, hardly half the length of the body. Abdomen hardly extending to the middle of the hind wings. Legs rather stout; hind tibiæ with two small apical spurs. Wings very broad, beset with long hairs; hind wings ciliated about the inner border beneath with extremely long hairs; four inferior veins.

1. Pterothysanus laticilia.

Mas. *Niger; caput, palpi, antennæ basi et thorax antice rufa; abdomen albidum, apice luteum; alæ anticæ nigro-fuscæ albo maculatæ; posticæ albæ fasciis tribus macularibus nigro-fuscis, intus longissime ciliatæ.*

Black. Head, palpi and thorax in front red. Antennæ red at the base. Abdomen whitish; tip of the male luteous. Fore wings blackish brown, with several large and small white spots and with a row of white spots of various size along the outer border. Hind wings white with three irregular and partly macular blackish brown bands, ciliated with extremely long hairs along the inner border and the adjoining part. Length of the body 6 lines; of the wings 26—30 lines.

a. Silhet. From the Rev. J. Stainforth's collection.
b. East Indies. Presented by E. Doubleday, Esq.

Genus 40. OTROEDA.

Corpus longum, gracile, lineare, cylindricum. Palpi porrecti. capite paullo longiores; articulus 3us acuminatus, 2i dimidio paullo brevior. Antennæ *maris* late pectinatæ, corporis dimidio paullo breviores. Abdomen alarum margines posticas non attingens. Pedes graciles; tibiæ posticæ calcaribus quatuor sat longis. Alæ latissimæ, semihyalinæ, nigro notatæ, venis quatuor inferioribus.

Phalæna, p., *Cram.*
Nyctemera, p., *Hübn.*

Body long, slender, linear, cylindrical. Palpi porrect, a little longer than the head; third joint acuminated, a little less than half the length of the second. Antennæ of the male deeply pectinated, rather less than half the length of the body. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ with four rather long spurs. Wings very broad, especially the hind pair, semihyaline, white or luteous with black marks; four inferior veins.

1. Otroeda Hesperia.

Alba; antennæ nigræ; alæ marginibus nigris albo maculatis; anticæ basi nigro strigatæ fasciis duabus obliquis nigris; posticæ plaga postica lutea.

Phalæna Hesperia, *Cram. Pap. Exot.* iii. 99, 100, pl. 251, f. A, B.
Nyctemera Hesperia, *Hübn. Verz. Schmett.* 178, 1841.

Guinea.

Var. β. Bands of the fore wings indistinct, interrupted and abbreviated.

Var. γ. Bands abbreviated hindward.

Var. δ. Bands complete.

Var. ε. Fore spot but one of the hind wings enclosed.

d—e. Ashanti. From the Wesleyan Missionary Society's collection.
f. Algoa Bay. Presented by Dr. Pereira.
g. Sierra Leone. Presented by the Rev. D. F. Morgan.

2. Otroeda occidentis.

Nigra; caput albo maculatum; thorax albo bivittatus; abdomen album; alæ anticæ nigræ maculis marginalibus et fasciis duabus albis; posticæ albæ marginibus nigris albo maculatis.

Black. Head with white spots. Proboscis testaceous. Thorax with two white stripes. Pectus clothed with testaceous hairs. Abdomen white. Legs white, with brown stripes. Fore wings black, with a row of white spots along the outer border, with whitish basal streaks, and with two oblique white discal bands, the second much shorter and narrower than the first. Hind wings white, with a testaceous mark behind, and with broad black borders which contain a double row of white spots. Length of the body 12 lines; of the wings 36 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

3. Otroeda vesperina.

Nigra, albo guttata; thorax testaceo bivittatus; abdomen testaceum, fusco vittatum; pedes albidi, fusco vittati; alæ testaceæ marginibus nigris albo maculatis, anticæ strigis basalibus fasciisque duabus obliquis discalibus nigris.

Black. Head and thorax with white dots. Proboscis testaceous. Thorax with two whitish testaceous stripes. Pectus clothed with testaceous hairs. Abdomen testaceous, with a brown dorsal stripe. Legs whitish, with brown stripes. Wings testaceous or pale luteous, with black white-spotted borders. Fore wings with black streaks at the base, and with two oblique black discal bands; black borders at the tips occupying one-third of the length of the wings. Hind wings darker than the fore wings. Length of the body 12 lines; of the wings 36 lines.

a. Congo. Presented by Sir J. Richardson.

4. Otroeda Cafra.

Alæ albæ; anticæ strigis duabus transversis, una humerali altera mesia, apiceque marginali nigricantibus; posticæ lunula punctisque submarginalibus atris.

Phalæna (Bombyx) Cafra, *Drury, App.* iii. *Ill. Exot. Ins.* iii. 5, pl. 5, f. 1.
Callimorpha? Cafra, *Westw. ed. Drury*, iii. 6, pl. 5. f. 1.
Sierra Leone.

5. Otroeda Nerina.

Alæ anticæ nigræ, venis basalibus luteis, fasciis duabus punctisque submarginalibus albidis; posticæ fulvo-fuscæ apice nigro, punctis submarginalibus albis.

Phalæna (Bombyx) Nerina, *Drury, App.* iii. *Ill. Exot. Ins.* iii. 6, pl. 5, f. 2.
Callimorpha? Nerina, *Westw. ed. Drury*, iii. 6, pl. 5, f. 2.
Sierra Leone.

Genus 41. EUSCHEMA.

Corpus sat validum, sublineare, fere cylindricum, longitudine mediocri. Palpi porrecti, capite vix breviores; articulus 3us linearis, apice conicus. Antennæ *maris* pectinatæ, *fœminæ* subpectinatæ. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ anticæ *maris* angustæ, *fœminæ* latæ; posticæ latissimæ, abdomen multo superantes; venæ inferiores quatuor.

Euschema, *Hübn. Verz. Schmett.* 175.
Hazis, p., *Boisd.; Blanchard.*

Body rather stout, moderately long, nearly linear and cylindrical. Palpi porrect, nearly as long as the head; third joint linear, conical at the tip, more than half the length of the second. Antennæ moderately pectinated in the male, slightly pectinated in the female, more than half the length of the body. Abdomen not extending near so far as the hind wings. Legs slender; hind tibiæ with four short spurs. Fore wings much narrower in the male than in the female. Hind wings very broad; four inferior veins.

1. Euschema militaris.

Alæ concolores, luteo-flavæ, maculis lineisque violaceis; anticæ apice late violaceæ albogue maculatæ.

Phalæna Attacus militaris, *Linn. Syst. Nat.* ii. 811, 12; *Mus. Lud. Ulr.* 375.

——— ——— *Ræs. Ins.* iv. pl. 6, f. 3. *D'Aubent. Miscell.* pl. 67, f. 1.

Phalæna militaris, *Cram. Pap. Exot.* i. 46, pl. 29, f. B.

Bombyx militaris, *Fabr. Syst. Ent.* 559, 12; *Sp. Ins.* ii. 171, 22; *Mant. Ins.* ii. 110, 25. *Oliv. Enc. Meth. Ins.* v. 32, 32, pl. 70, f. 5.

Phalæna Bombyx Attacus militaris, *Gmel. ed. Syst. Nat.* i. 5, 2407, 12.

——— *Donov. Epit. Ins. Asia*, pl.

Euschema militaris, *Hübn. Verz. Schmett.* 175, 1803.

Hazis militaris, *Boisd. Voy. de l'Astrolabe*, Pt. 2, *Lep.* 203, 1. *Feisthamel, Voy. de la Favorite, Suppl.* 20.

East Indies. Java. Amboina. New Guinea. China.

a, *b*. North India. From Mr. L. James' collection.
c, *d*. Silhet. From Mr. Sowerby's collection.
e. Hong Kong. Presented by J. C. Bowring, Esq.
f. China. Presented by G. Reeve, Esq.
g. China. Presented by E. Doubleday, Esq.

2. Euschema Bellona.

Flava; palpi apice et antennæ nigra; thorax nigro varius; abdomen fusco fasciatum; pedes albidi; alæ nigro-cyaneæ, dimidio fere basali flavo, anticæ fasciis duabus albis.

Yellow. Palpi with black tips. Proboscis and antennæ black. Thorax with four black spots in front and with a black band in the middle. Abdominal segments with brown bands which are darker beneath than above. Legs whitish. Wings blackish blue. Fore wings yellow for more than one-third of the length from the base, with black spots for one-fourth of the length; two white bands beyond the yellow part, ending hindward in less distinct spots. Hind wings yellow for half the length from the base, with two blackish blue spots, and a band which is connected with the blue beyond. Length of the body 10—11 lines; of the wings 34—36 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.

3. Euschema subrepleta.

Flava; capitis fascia, palpi apice et antennæ nigra; thorax nigro-cyaneo trifasciatus; abdomen supra nigro-cyaneum, fasciis flavis; pedes albidi; alæ anticæ nigro-cyaneæ maculis hyalinis, triente basali flava vittis duabus fasciaque nigro-cyaneis; posticæ fasciis quatuor nigro-cyaneis.

Bright yellow. Palpi towards the tips, proboscis and antennæ black. Head with a black dot in front and a black band behind the antennæ. Thorax with three blackish blue bands. Abdomen above blackish blue; segments with yellow hind borders. Legs whitish; coxæ and femora with yellow hairs. Fore wings with two blackish blue stripes and one blackish blue band towards the base, blackish blue with hyaline spots for nearly two-thirds of the length from the tips. Hind wings with four blackish blue bands which are partly interrupted and connected, and vary in breadth and completeness. Length of the body 8 lines; of the wings 26 lines.

a. Borneo. From Mr. H. Low's collection.
b. Ceylon. Presented by R. Templeton, Esq.
c. Ceylon. From the Rev. J. Wenham's collection.

4. Euschema flavescens.

Flava; palpi apice et antennæ nigra; thorax et abdomen nigro-cyaneo fasciata; alæ anticæ nigro-cyaneæ fasciis duabus macularibus albis, triente basali flava; posticæ fasciis marginibusque nigro-cyaneis.

Yellow. Head white, black above. Palpi towards the tips, proboscis and antennæ black. Thorax with a blackish blue band in front and a broader one behind. Abdominal segments with bluish black bands. Fore wings partly blackish blue in the hind border near the base; nearly two-thirds from the tips blackish blue including two irregular macular white bands which are variable in breadth. Hind wings with blackish blue borders and in the disk with one or two irregular blackish blue bands; veins between the second and the hind margin occasionally bordered with blackish blue. Length of the body 6—8 lines; of the wings 28—32 lines.

a. North India. From Mr. L. James' collection.
b. Silhet. Presented by E. Doubleday, Esq.

5. EUSCHEMA DISCALIS.

Albida; palpi apice et antennæ nigra; thorax fasciis duabus anticis nigro-cyaneis; abdomen apice et subtus flavum; alæ anticæ nigro-cyaneæ fasciis tribus interruptis albis hyalinis; posticæ nigro-cyaneæ fasciis duabus macularibus flavis, basi albæ.

Whitish. Disk of the front brown. Palpi towards the tips, proboscis and antennæ black. Thorax with two blackish blue bands in front. Pectus and coxæ with yellow hairs. Abdomen pale yellow at the tip and beneath. Fore wings blackish blue with three interrupted and irregular white hyaline bands; a large white mark on the hind border corresponding to the white of the hind wings. Hind wings towards the base white including a blackish blue spot, beyond which they are blackish blue and include two macular irregular yellow bands. Length of the body 8½—9 lines; of the wings 30—32 lines.

a. East Indies. From Mr. Warwick's collection.
b. Penang. Presented by Sir W. Norris.

6. EUSCHEMA MALAYANUS.

Albida, subtus lutea; palpi et antennæ nigra; thorax nigro-cyaneo bifasciatus; alæ subhyalinæ albido-subcyaneæ nigro-cyaneo maculatæ; anticæ nigro-cyaneo marginatæ; posticæ macula postica interiore lutea.

Hazis Malayanus, *Guér. Voy. Delessert, Hist. Nat.* 89, pl. 23, f. 2. Malay.

a. Borneo. From Mr. H. Low's collection.

7. EUSCHEMA TRANSVERSA.

Albida; palpi apice et antennæ nigra; thorax nigro-cyaneo bifasciatus; abdominis segmenta fusco fasciata; alæ cinereo-hyalinæ, maculis fasciisque interruptis et anticarum nonnunquam dimidio basali nigro-cyaneis.

Whitish. Palpi white, black towards the tips. Proboscis and antennæ black. Thorax with two blue bands. Pectus thickly clothed with yellow hairs. Abdomen with a pale brown band on the fore border of each segment; under side of the male with yellow hairs. Legs whitish. Wings grayish hyaline with blackish blue spots. Fore wings with interrupted bands; tips and occasionally

half the length from the tips blackish blue. Hind wings with an undulating band between two spots near the base and a row of spots along the border, the latter spots are partly connected at the tips of the wings. Length of the body 10—11 lines; of the wings 32—38 lines.

a, *b*. Ceylon. From the Rev. J. Wenham's collection.
c, *d*. Ceylon. Presented by R. Templeton, Esq.
e. ——— ? From Mr. Leadbeater's collection.

8. Euschema vilis.

Fusca; antennæ nigræ; abdominis segmenta flavo fasciata; alæ anticæ maculis tribus fasciaque albis semihyalinis; posticæ flavæ, marginibus intersectis fuscis.

Brown. Proboscis tawny. Antennæ black. Pectus clothed with yellow hairs. Abdomen with a yellow band on the hind border of each segment. Legs with testaceous down. Wings with a silky lustre. Fore wings with a semihyaline whitish spot near the fore border beyond one-third of the length; two smaller spots, one in front, the other behind between it and an upright band of the same colour which is beyond two-thirds of the length. Hind wings yellow with brown borders which are intersected by a narrow undulating yellow band. Length of the body 8 lines; of the wings 25 lines.

a. Ceylon. Presented by R. Templeton, Esq.

9. Euschema Mars.

Thorax violaceus; prothorax flavus; abdomen rufescens; alæ subconcolores, nigro-violaceæ; anticæ fasciis punctoque albis; posticæ basi albo maculatæ, fasciaque subpostica lutea, plus minusve obsoleta; fœm. *alæ posticæ disco albo, fascia transversa submarginali lutea.*

Hazis Mars, *Boisd. Voy. Duperrey, Zool.* ii. 283, *Atlas, Ins.* pl. 19, f. 3, (Deileptena Poryii, *Guér.*); *Voy. de l'Astrolabe*, Pt. 1, *Lep.* 205, 3.

Offack. Rawack.

10. Euschema Agorius.

Alæ concolores, luteo-flavæ, fascia communi margineque nigris; anticæ basi nigricantes.

Hazis Agorius, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 204, 2, pl. 5, f. 1.

Offack.

Genus 42. PRÆSOS.

Corpus longum, sat validum, subcylindricum, fere lineare. Palpi ascendentes, capite multo breviores; articulus 3us conicus, minimus. Antennæ filiformes, in utroque sexu simplices. Abdomen alarum margines posticos non attingens. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latæ; venæ inferiores quatuor.

Body long, rather stout, nearly linear and cylindrical. Palpi ascending, much shorter than the head; third joint conical, very small. Antennæ filiform, simple in both sexes, more than half the length of the body. Abdomen not extending so far as the hind wings. Legs rather stout; hind tibiæ with four rather long spurs. Wings broad; four inferior veins.

1. PRÆSOS MARIANA.

Nigra; abdomen flavum, basi nigrum; alæ anticæ strigis transversis cyaneis fasciisque tribus albis, 1a integra, 2a 3aque macularibus; posticæ flavæ, fasciis duabus basique nigris.

Eusemia Mariana, *White, Mac Gillivray, Voyage of the Rattlesnake.*

Black. Abdomen bright yellow, black towards the base. Fore wings with transverse blue streaks, and with three white bands; the first entire at one-third of the length, the second macular and widely interrupted in the middle at two-thirds of the length, the third subapical and composed of two small spots. Hind wings bright yellow, black towards the base, and with two irregular black bands which are partly united by black streaks along the veins, the second interrupted. Length of the body 9—10 lines; of the wings 36 lines.

a, b. Australia. From the Voyage of H.M.S. Rattlesnake.

Genus 43. EPICOPEIA.

"Corpus debile, magnitudine minori. Caput parvum. Oculi laterales. Palpi minuti, supra haud conspicui, 3-articulati, articulo 1o valde squamoso, 3o ad apicem subnudo. Mandibulæ minutæ distantes. Maxillæ nullæ. Alæ magnæ, valde elongatæ; anticæ integræ, posticæ incisuris semicircularibus inter venas, incisura externa et anali (illa præsertim) valde elongatis. Hamus et tendines omnino carent. Areola discalis alarum anticarum vix pone tertiam

partem alæ extendit. Vena mediastina simplex; vena postcostalis ante apicem areolæ discalis emittit ramulum simplicem fere ad apicem costæ extensum; ex apice supero et antico hujus areolæ ramum alterum etiam emittit, hic ramus ramulos duos superos ad apicem alæ extensos emittit. Vena ordinaria transversa (areolam discalem claudens) valde angulata, venasque duas simplices emittit. Vena mediana brevis triramosa. Areola discalis alarum posticarum brevis, vena valde angulata (ramum unicum emittente), postice clausa; vena mediastina simplex, vena postcostalis bifida ramis valde elongatis, externo intra marginem incisionis currente; vena mediana triramosa. Pedes crassiusculi, longitudine mediocri. Tibiæ anticæ intus spina lata mobili instructæ, apice inermes; tibiæ intermedia apice bicalcaratæ, posticæ vero, ante apicem, ut et in apice ipso, bicalcaratæ."

Epicopeia, *Westw. Arcana Entom.* 17.

1. Epicopeia Polydora.

Alæ anticæ luteo-subcinereæ nigro lineatæ; posticæ nigræ, fascia media alba maculisque cuneatis submarginalibus rufis in medio nigris.

Epicopeia Polydora, *Westw. Arcana Ent.* 19, 1, pl. 5, f. 1.

a. North India. From Mr. L. James' collection.

2. Epicopeia Philenora.

Alæ anticæ subcinereæ nigro lineatæ, subtus ad costam macula sanguinea; posticæ nigræ chalybeo nitidæ, subtus macula parva versus angulum externum lineaque tenui brevi ad angulum analem sanguineis.

Epicopeia Philenora, *Westw. Arcana Ent.* 19, 2, pl. 5, f. 2.
E. Polydora, Mas?

Assam.

Note.—The following genera to *Heteropare* will form a subfamily for which the name *Chalcosiidæ* is proposed. They are distinguished by the convex or conical and prominent front, by the metallic-coloured antennæ, by the minute palpi, by the slender legs, and by the hind tibiæ with only two minute apical spurs.

Genus 44. GYNAUTOCERA.

Corpus sat gracile, sublineare, fere cylindricum, longitudine mediocri. Caput antice conicum. Palpi capite multo breviores; articulus 3us acuminatus, minimus. Antennæ filiformes, *maris* densissime et latissime pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen *maris* alarum margines posticos attingens, *fœminæ* brevius. Pedes graciles; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ anticæ subfusiformes, longæ, angustæ, *maris* posticis duplo longiores; venæ quatuor superiores, 2a trifurcata; quatuor inferiores, 1a et 2a basi contiguæ.

Gynautocera, p., *Guér. Mag. Zool.* 12, 1830. *Westw. Arcana Ent.* 19.

Body rather slender, nearly linear and cylindrical, of moderate length. Head prominent and conical in front. Palpi much shorter than the head; third joint pointed, very small, less than one-fourth of the length of the second. Antennæ filiform, very thickly and deeply pectinated in the male, moderately pectinated in the female. Abdomen of the male extending as far as the hind wings, that of the female shorter. Legs slender; hind tibiæ with two minute apical spurs. Fore wings subfusiform, long and narrow, twice the length of the hind wings in the male; rather shorter in the female; four superior veins, second trifurcate; four inferior veins, first and second almost contiguous at the base.

1. Gynautocera papilionaria.

Corpus nigrum, vertice rubro, lateribus miniatis; alæ atræ, anticæ subfalcatæ, posticæ disco macula alba suturis divisa in medio disco, singulæ subtus in basi maculis miniatis.

Gynautocera papilionariâ, *Guérin, Mag. Zool.* 12, 1830. *Westw. Arcana Ent.* 19.

Bengal.

a. Silhet. Presented by E. Doubleday, Esq.
b, c. Silhet. From Mr. Sowerby's collection.
d. Nepaul. Presented by Major-General Hardwicke.

Genus 45. HISTIA.

Corpus gracile, lineare, cylindricum, sat longum. Caput convexum, non conicum. Palpi capite multo breviores; articulus 3us

acuminatus, 2o quadruplo brevior. Antennæ filiformes, *maris* densissime et latissime pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen alarum margines posticos non attingens. Pedes gracillimi; tibiæ posticæ calcaribus duobus posticis minimis. Alæ anticæ *maris* angustæ, longissimæ, *fœminæ* breviores et latiores; venæ superiores quatuor, 3a trifurcata; inferiores quatuor, 1a et 2a basi contiguæ. Alæ posticæ, *maris* præsertim, longæ, angustæ, apice versus attenuatæ.

Histia, *Hübn. Verz. Schmett.* 198.
Dysphania, p., *Hübn. Verz. Schmett.* 175.

Body slender, linear, cylindrical, rather long. Head convex, but not conical in front. Palpi much shorter than the head; third joint pointed, about one-fourth of the length of the second. Antennæ filiform, very thickly and deeply pectinated in the male, moderately pectinated in the female. Abdomen extending not near so far as the hind wings. Legs very slender; hind tibiæ with two extremely minute spurs. Fore wings very long and narrow in the male, shorter and broader in the female; four superior veins, third trifurcate; four inferior veins, first and second near together at the base. Hind wings, in the male especially, long and narrow and attenuated towards the tips.

1. HISTIA FLABELLICORNIS.

Nigra, rufo fasciata, subtus rufa nigro maculata; pedes fulvi; alæ anticæ nigræ cinereo strigatæ; posticæ cyaneæ apice nigræ.

Zygæna flabellicornis, *Fabr. Sp. Ins.* ii. 163, 32; *Mant. Ins.* ii. 105, 38; *Ent. Syst.* iii. 1, 398, 40.
Papilio Rhodope, *Cram. Pap. Exot.* i. 49, pl. 30, f. E.
Sphinx Zygæna flabelliformis, *Gmel. ed. Syst. Nat.* i. 5, 2396, 135.
Histia flabellicornis, *Hübn. Verz. Schmett.* 198, 2015.

Black. Body beneath red with black spots. Head red above. Thorax with a red band. Abdomen with red bands which widen towards the wholly red tip. Legs tawny. Fore wings black, with gray streaks. Hind wings blue, with black tips.

a. Hong Kong. Presented by J. C. Bowring, Esq.
b. North China. From Mr. Stevens' collection.
c. ——— ? Presented by Major-General Hardwicke.
d. North India. From Mr. L. James' collection.
e. North India.
f. ——— ? Presented by E. Doubleday, Esq.

2. Histia Selene.

Alæ obscure virides, æneo-micantes; anticæ valde productæ, sublanceolatæ; posticæ medio macula magna alba, limbo virescente, subtus alæ omnes basi rubræ; pectus et abdomen subtus rubro annulata; antennæ virides, pectinatæ.

Chalcosia Selene, *Kollar, Kaschmir von Von Hugel*, 463, 6.

Probably a variety of *H. flabellicornis;* the white band of the hind wings being the only apparent difference.

a. Java. Presented by the East India Company.

3. Histia vacillans.

Fœm. *Nigra; corpus subtus, caput, thorax anticus, et abdominis fasciæ rufa; antennæ virides; alæ anticæ apices versus cinereo strigatæ, posticæ vix attenuatæ, fascia lata arcuata alba.*

This species seems equally allied to *Hystia* and to *Gynautocera*, which two genera should probably be reunited.

Fem. Black. Body beneath, head, thorax in front and bands of the abdomen red. Antennæ green. Fore wings with gray streaks towards the tips. Hind wings slightly angular but hardly attenuated at the tips, with a broad curved white band. Length of the body 7½ lines; of the wings 27 lines.

a, b. Java. From Mr. Argent's collection.

Genus 46. POMPELON.

Corpus gracile, lineare, sat longum. Caput antice truncato-conicum. Palpi capite valde breviores; articulus 3us minimus, acuminatus. Antennæ setaceæ, *maris* dense et late pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen depressum, *fœminæ* alarum margines posticos fere attingens, *maris* brevius. Pedes gracillimi; tibiæ posticæ calcaribus quatuor apicalibus minimis. Alæ sat longæ, mediocriter latæ; anticarum vena 2a superior trifurcata, 1a et 2a inferiores basi conjunctæ; posticarum venæ 1a et 2a inferiores basi remotæ.

Gynautocera, p., *Guérin.*

Body slender, linear, rather long. Head truncate-conical and slightly prominent in front. Palpi very much shorter than the head;

third joint very small, acuminated, not one-fourth of the length of the second. Antennæ setaceous, rather deeply and closely pectinated in the male, moderately pectinated in the female. Abdomen depressed, extending in the female nearly as far as the hind wings, shorter in the male. Legs very slender; hind tibiæ with two very minute apical spurs. Wings rather long, moderately broad. Fore wings with four superior veins, second trifurcate; four inferior veins; first and second united at the base. Hind wings with four inferior veins; first and second remote at the base.

1. POMPELON MARGINATA.

Alæ nigræ, margine exteriore cyaneo-micantes; anticæ subtus macula rotundata flava; corpus nigrum, subtus coccineum, maculis nigris lateralibus; pedes nigri, cyaneo-micantes.

Gynautocera marginata, *Guér. Voy. Delessert, Hist. Nat.* 83, pl. 25, f. 1.

a. Penang. Presented by Sir W. Norris.
b, c. Java. From Mrs. Henry's collection.

Genus 47. CYCLOSIA.

Corpus longum, sat gracile, fere lineare, subcylindricum. Caput antice valde conicum. Palpi capite valde breviores; articulus 3us conicus, 2i dimidio brevior. Antennæ filiformes, metallicæ, in utroque sexu densissime pectinatæ. Abdomen alarum margines posticos non attingens. Pedes graciles; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ amplæ; venæ quatuor superiores, 3a bifurcata; quatuorque inferiores, 1a et 2a basi conjunctæ.

Cyclosia, *Hübn. Verz. Schmett.* 177.
Esthema, p., *Hübn. Verz. Schmett.* 178.
Amesia, *Westw. Arcana Ent.* 19.
Heleona, *Westw. ed. Drury.*

Body long, rather slender, nearly linear and cylindrical. Head very conical in front between the eyes. Palpi very much shorter than the head; third joint conical, less than half the length of the second. Antennæ filiform, metallic colour, very closely but not deeply pectinated in both sexes. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ with two minute apical spurs. Wings long and broad. Fore wings narrower than the hind wings; discal areolet intersected by a distinct vein; disco-cellular vein forming an acute inward angle; four superior veins, the third

forked, and its fore branch also forked; four inferior veins, the first and second united for some space from the base.

1. Cyclosia sanguiflua.

Alæ nigræ albo punctatæ; anticæ albo et flavo punctatæ, venisque posticis rubiginosis; posticæ nigræ, margine cæruleo. Long. alar. 49½ lin.

——— —— *Drury, Ins. Exot.* ii. 35, pl. 20, f. 1, 2.
Phalæna sanguiflua, *Drury, App.* ii.
Callimorpha? sanguiflua, *Westw. ed. Drury*, ii. 37, pl. 20, f. 1, 2; *Royle's Nat. Hist. Himalayan Mount.*
Amesia sanguiflua, *Westw. Arcana Ent.* 19.

a. Silhet. Presented by E. Doubleday, Esq.
b, c. Silhet. From Mr. Argent's collection.

2. Cyclosia Namouna.

Nigro-fusca; caput et pectus albo guttata; antennæ cyaneo-purpureæ; abdomen maculis lateralibus albo-cyaneis, apice cyaneum; alæ quatuor subtus et posticæ supra maculis albo-cyaneis.

——— Namouna, *Doubleday, MSS.*

Deep brownish black. Head and pectus with white dots. Antennæ bluish purple. Abdomen bright blue at the tip, and with blue and white spots along each side. Wings beneath, and the hind wings above adorned with blue spots whose disks are mostly white; veins along the hind borders of the hind wings bordered with white; inner angle of the hind wings hoary above white beneath. Length of the body 13 lines; of the wings 40 lines.

a. ———? From Mr. Children's collection.

The outer border of the fore wings is slightly convex in this and the following species, not slightly concave as in *C. sanguiflua.*

3. Cyclosia Aliris.

Atra; caput et pectus albo maculata; antennæ cyaneæ; thorax cyaneo bivittatus; abdomen maculis lateralibus albis, apice cyaneo subtus testaceo; alæ maculis basalibus rufis, anticis et apicalibus albo-cyaneis, posticæ apice cyaneæ.

——— Aliris, *Doubleday, MSS.*

Deep black. Head and pectus with white spots. Antennæ blue, tinged with green and purple. Thorax with a blue stripe along each side. Abdomen with a row of white spots along each side; tip blue, testaceous beneath. Wings with some red spost towards the base, and with some blue and white spots along the fore border and towards the tips; these spots are larger and more numerous on the under side, and extend there over the whole wing. Hind wings bright blue towards the tips. Length of the body 10—12 lines; of the wings 34—38 lines.

a, *b*. Silhet. From Mr. Sowerby's collection.
c. Silhet. Presented by E. Doubleday, Esq.
d. North India. From Mr. L. James' collection.

4. Cyclosia venusta.

Mas. *Atra; corpus, antennæ et pedes cyanea; caput et pedes subtus alba; abdomen subtus albo fasciatum; alæ maculis apices versus albis, apice cyaneæ.* Fœm. *Alæ posticæ areolis plerumque albidis.*

Male. Deep black. Body, antennæ and legs metallic blue or green. Head and legs white beneath. Proboscis piceous. Abdomen beneath with white bands, which are dilated on each side; tip white beneath. Wings with a slight cupreous tinge which is most apparent beneath, with white spots from about the middle to the tips, towards which they are brilliant blue, as is also the costa beneath. *Female.* Differs from the male in the white spots which are larger and more numerous, in the brilliant blue tinge which is mostly wanting, and in the areolets of the hind wings which are more or less whitish. Length of the body 9—10 lines; of the wings 30—34 lines.

a, *b*. Silhet. From Mr. Argent's collection.
c. ———? Presented by E. Doubleday, Esq.

5. Cyclosia Papilionaris.

Alæ albido-flavæ, margine venisque dilatatis ramosis nigris et versus medium coalitis, maculas albas efformantibus.

Heleona Papilionaris, *Westw. ed. Drury.* ii. 4, pl. 2, f. 4.
——— —— *Drury, Ins. Exot.* ii. 4, pl. 2, f. 4.
Phalæna (Noctua) Papilionaris, *Drury, App.* ii.

Phalæna Attacus Papilionaris, *Cram. Pap. Exot.* i. 45, pl. 29, f. 8.
Phalæna venaria, *Fabr. Ent. Syst.* iii. 2, 156, 96. *Gmel. ed. Syst. Nat.* i. 5, 2470, 701.
Esthema Papilionaris, *Hübn. Verz. Schmett.* 178, 1836.

a, *b*. North India. From Mr. L. James' collection.
c. East Indies. From Archdeacon Clerk's collection.
d. Silhet. From Mr. Sowerby's collection.
e. Silhet. From the Rev. J. Stainforth's collection.
f. Madras. Presented by Mrs. Capt. Hawlter.
g. Hong Kong. Presented by J. C. Bowring, Esq.

The Chinese specimen is much darker than the others, and especially so on the hind wings.

6. Cyclosia subcyanescens.

Mas. *Cinereo-viridis, subtus alba; antennæ virides; alæ albæ venis plerumque cyaneis; anticæ apices versus nigricentes; posticæ cyaneo marginatæ subtus apud marginem internum flavescentes.* Fœm. *Prothorax coccineus; alæ anticæ apices versus albæ, fascia incompleta nigra; posticæ apud marginem internum flavæ margine postico albo.*

Male. Body cinereous green, white beneath. Palpi and legs white. Antennæ green. Wings white; veins in the hind wings and towards the base of the fore wings blue. Fore wings black towards the tips with the exception of the disks of the areolets, more white and slightly tinged with blue beneath. Hind wings with blue hind borders; a black spot on each tip; under side mostly yellow with black hind borders. *Female.* Prothorax crimson. Fore wings white towards the tips with the exception of an irregular black band and the black borders of the veins, mostly black towards the base beneath. Hind wings yellow along the inner border; hind border white beneath. Length of the body 7½—9 lines; of the wings 23—32 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.
c. ——— ? From Mr. Children's collection.

7. Cyclosia Panthona.

Cyanea; alæ nigræ, maculis marginalibus albis.

Phalæna Geometra Panthona, *Cram. Pap. Exot.* iv. 68, pl. 322, f. C.

a, *b*. Hong Kong. Presented by J. C. Bowring, Esq.
c. Silhet. From the Rev. J. Stainforth's collection.
d. North India. From Mr. L. James' collection.
e. East Indies. From Archdeacon Clerk's collection.

8. CYCLOSIA FULIGINOSA.

Nigro-cyanea, subtus albida; antennæ cyaneæ; thorax antice rufo bifasciatus; alæ nigro-fuscæ, fasciis duabus macularibus albidis, venis cyaneis; posticæ ex parte flavæ.

Male. Blackish blue, whitish beneath. Antennæ blue. Thorax with two red bands in front. Legs whitish beneath. Wings blackish brown, with two macular whitish bands which are most conspicuous beneath, one in the middle, the other subapical; veins mostly blue. Hind wings yellow along the inner border above and over most of the surface beneath excepting the fore border and the tips. Length of the body 7½ lines; of the wings 25 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.

Genus 48. ERASMIA.

Corpus gracile, subcylindricum. Caput parvum, palpis parvis. Proboscis spiralis, elongata. Antennæ *maris* bipectinatæ, pectinibus mediocribus. Alæ anticæ oblongæ, subovales, integræ, venis posticis paullo arcuatis, areola discali clausa; posticæ subrotundatæ, venis posticis arcuatis. Pedes graciles.

Erasmia, *Hope, Trans. Linn. Soc. Lond.* xviii. 446. *Westw. Arcana Ent.* 18.

Body rather long and slender, nearly linear and cylindrical. Head conical and very prominent in front. Palpi very much shorter than the head; third joint conical, less than half the length of the second. Antennæ filiform, closely pectinated. Abdomen extending nearly or quite as far as the hind wings. Legs slender; hind tibiæ with two small apical spurs. Wings ample; veins rather curved towards the tips; four inferior veins; first and second united for some distance from the base.

1. ERASMIA PULCHELLA.

Argenteo-viridis; alæ anticæ nigræ, maculis viridi-cæruleo-argenteo ornatæ, fascia irregulari ante medium rufa, maculisque majoribus albis pone medium positis; posticæ stramineæ, basi apiceque nigræ, venis viridi-cærulescentibus.

Erasmia pulchella, *Hope, Trans. Linn. Soc. Lond.* xviii. 446, pl. 31 f. 5. *Westw. Arcana Ent.* 18.

Assam.

a—*c*. Silhet. From Mr. Sowerby's collection.
d. North India. From Mr. L. James' collection.

This genus is very nearly allied to *Cyclosia*, and the apical border of the fore wings has the same outline in *E. pulchella* and in *C. sanguiflua*.

Genus 49. CAMPYLOTES.

Corpus parvum. Caput parvum. Ocelli 2. Palpi brevissimi, supra haud discernendi. Proboscis elongata. Antennæ graciles, biramosæ. Abdomen gracile, pone alas haud protensum. Alæ oblongæ, subovales, integræ, venis apicalibus valde arcuatis; anticæ areola discali clausa, venas duas postice emittens, quarum exterior trifurcata; posticæ etiam areola discali clausa vena recurrente intermedia bifurcata.

Campylotes, *Westw. Royle's Illustr. Nat. Hist. Himalayan Mount.* liii.; *Arcana Ent.* 19.

Head slightly conical in front. Palpi much shorter than the head; third joint conical, not more than half the length of the second. Antennæ filiform, closely pectinated to the tips; branches of moderate length. Abdomen extending nearly or quite as far as the hind wings. Legs slender; hind tibiæ with two minute apical spurs. Wings ample; veins towards the tips much contorted; four inferior veins, but the first, second and third are united for nearly one-fourth of the length where the third diverges, and the first and second are separated at a little beyond half the length; some limpid spots towards the tips.

1. CAMPYLOTES HISTRIONICUS.

Corpus nigro-æneum, maculis abdominis lateralibus flavis; alæ anticæ æneæ, costa, fasciisque duabus discalibus rufis, fasciisque tribus internis per totam longitudinem alarum currentibus flavis, maculis 8 vel 9 (spatium inter venas apicales occupantibus) albis; alæ posticæ similiter coloratæ, at maculæ terminales flavo ornatæ.

Campylotes histrionicus, *Westw. Royle's Illustr. Nat. Hist. Himalayan Mount.* liii. pl. 10, f. 1; *Arcana Ent.* 19.
Chalcosia histrionica, *Kollar, Kaschmir von Von Hugel* 663, 5.

a—e. Nepaul. Presented by Major-General Hardwicke.
f. North India. From Mr. Stevens' collection.
g, h. Himalayan Mountains. From Mr. Children's collection.

Genus 50. CHALCOSIA.

Corpus gracile, sat longum, sublineare, fere cylindricum. Caput antice subconico-truncatum. Palpi capite multo breviores; articulus 3us conicus, 2o quadruplo brevior. Antennæ in utroque sexu subpectinatæ. Abdomen alarum margines posticos vix attingens, *maris* apice subfasciculatum. Pedes gracillimi; tibiæ posticæ calcaribus duobus minimis apicalibus. Alæ latæ; anticarum venæ 1a et 2a inferiores basi conjunctæ, 2a superior trifurcata.

Chalcosia, p., *Hübn. Verz. Schmett.* 173.
Gynautocera, p., *Guérin.*

Body slender, rather long, nearly linear and cylindrical. Head slightly prominent and truncated in front. Palpi much shorter than the head; third joint conical, not more than one-fourth of the length of the second. Antennæ slightly and equally pectinated in both sexes. Abdomen hardly extending so far as the hind wings, slightly tufted at the tip in the male. Legs very slender; hind tibiæ with two very minute apical spurs. Wings broad. Fore wings with four superior and four inferior veins; second superior vein trifurcate; first and second inferior veins united at the base.

1. CHALCOSIA PECTINICORNIS.

Cyanea; caput postice et thorax antice coccinea; abdomen aureo-viride, subtus album; pedes albi; alæ anticæ nigræ viridi venosæ, basi virides albo venosæ, albo bifasciatæ; posticæ albæ, marginibus nigris cyaneo venosis.

Sphinx pectinicornis, *Linn. Syst. Nat.* ii. 807, 44, (*Edw. Aves*, v. 36, pl. 226.)
Zygæna pectinicornis, *Fabr. Syst. Ent.* 554, 18; *Sp. Ins.* ii. 164, 35; *Mant. Ins.* ii. 105, 42; *Ent. Syst.* iii. 1, 399, 44. *Gmel. ed. Syst. Nat.* i. 5, 2397, 44.
Chalcosia Tiberina pectinicornis, *Hübn. Verz. Schmett.* 173, 1785.
Gynautocera pectinicornis, *Guér. Voy. Delessert, Hist. Nat.* 87, pl. 24, f. 4.

China.

a—e. Nepaul. Presented by Major-General Hardwicke.
f—h. North India. From Mr. Stevens' collection.
i, j. Himalayan Mountains. From Mr Children's collection.
k. ———? Presented by E. Doubleday, Esq.

2. Chalcosia Adalifa.

Atra; caput postice et thorax antice coccinea; antennæ et thoracis discus cyanea; alæ anticæ fasciis tribus nigris, 1a maculari; posticæ flavæ fascia apicali cyaneo-nigra.

Chalcosia Adalifa, *Doubleday, MSS.*

White. Head behind and thorax in front crimson. Antennæ and disk of the thorax blue. Fore wings tinged with green in front and on the veins; three black bands, 1st macular, second and third united hindward; under side black towards the base. Hind wings pale yellow, with an apical black band which is more or less tinged with blue and is subapical beneath. Length of the body 7—9 lines; of the wings 22—30 lines.

a. Silhet. Presented by E. Doubleday, Esq.
b—d. North India. From Mr. L. James' collection.

3. Chalcosia phalænaria.

Alæ utrinque flavæ; anticæ apice lato nigro, albo fasciato, linea costali maculisque tribus aut duabus in medio nigro-cyaneis; posticæ apice nigro maculatæ; vertex et prothorax sanguinei; thorax nigro-viridis, albo lineatus; abdomen flavum aut viride, sericeum.

Gynautocera phalænaria, *Guér. Voy. Delessert, Hist. Nat.* 84, pl. 24, f. 1.

a. Java. From Mrs. Henry's collection.
b, *c*. Java. From Mr. Children's collection.
d, *e*. Java. From Mr. Argent's collection.
f. Java. From the East India Company's collection.

4. Chalcosia Tiberina.

Alæ anticæ utrinque viridi-micantes, nigro maculatæ, fascia media lata maculisque apicalibus nigro-viridi micantibus; vertex et margo anticus prothoracis rubri; thorax viridi-micans; abdomen viridi-cæruleum, subtus album, lateribus nigro punctatum.

Phælana Tiberina, *Cram. Pap. Exot.* i. 52, pl. 32, f. C, D, (*Edw. Nat. Hist. Birds*, pl. 226).
Chalcosia Tiberina, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, vii. *Hipocritæ*, C. *Graciles*, 1, f. 1—4. *Kollar, Kaschmir von Von Hugel*, iv. 461, 1.

The subapical band of the fore wings varies much in size, and is sometimes obsolete above, and the border of the hind wings sometimes extends nearly over the whole surface.

Gynautocera affinis, *Guér. Voy. Delessert, Hist. Nat.* 86, pl. 24, f. 2.

a—*d*. Ceylon. From the Rev. J. Wenham's collection.
e, *f*. ——— ? From Mr. Milne's collection.
g. Hong Kong. Presented by Capt. Champion.
h. ——— ?

5. Chalcosia venosa.

Mas. *Cyanea, subtus alba; caput postice et thorax antice coccinea; abdomen supra viride; alæ flavido-albæ; anticæ ad costam et apud venas virides, fascia trienteque apicali nigris; posticæ nigro marginatæ.* Fœm. *Alæ anticæ fascia brevi subapicali nigra, posticæ flavido-albæ maculis duabus nigris.*

Chalcosia venosa, *MSS.*

Male. Blue, or golden green, white beneath. Head behind and thorax in front crimson. Abdomen green above. Wings yellowish white. Fore wings green in front and along the borders of the veins; an irregular almost divided band in the middle and the apical third part black. Hind wings with black borders which are

entire above and macular beneath. *Female.* Legs with bright green streaks. Fore wings with a short subapical band which also appears on the under side in the male. Hind wings wholly yellowish white excepting a black spot and a black dot near the tips. Length of the body 5—5½ lines; of the wings 17—19 lines.

Perhaps a variety of *C. Tiberina.*

a, *b*. Ceylon. Presented by R. Templeton, Esq.
c. Ceylon.

6. Chalcosia Zuleika.

Corpus subtus album; caput et thorax aureo-viridia vel cuprea; antennæ cyaneæ; abdomen supra albido-viride, lateribus subtus nigro maculatis; alæ anticæ octo-fasciatæ, fascia basali et 5a aureo-viridibus, 2a, 4a et 6a purpureis, 3a testacea, 7a lata alba, 8a lata apicali nigra viridi venosa; posticæ albæ apicibus nigris cyaneo venosis.

Chalcosia Zuleika, *Doubleday, MSS.*

Body white beneath. Head and thorax golden green or cupreous. Antennæ blue. Abdomen whitish green above, with a row of black spots on each side beneath. Fore wings golden green at the base with an adjoining purple band, to which succeeds a testaceous band, and after that a golden green band between two purple bands, then comes a broad curved white band, from whence to the tips the wings are black with green-bordered veins. Hind wings white, black with blue-bordered veins at the tips. Length of the body 6 lines; of the wings 20 lines.

a. Silhet. From Mr. Argent's collection.
b. Silhet. From the Rev. J. Stainforth's collection.

7. Chalcosia distincta.

Alæ anticæ utringue subcinereo-flavescentes, fasciis tribus maculariibus nigro-cyaneis; posticæ albæ, late cyaneo marginatæ; vertex flavus; prothorax nigro subcinereoque varius; thorax subcinereus, linea media nigra; abdomen flavum segmento 1o albo, subtus nigrum segmentis albo marginatis.

Gynautocera distincta, *Guér. Voy. Delessert, Hist. Nat.* 85, pl. 24, f. 3.

a. Assam. From Mr. Warwick's collection.

8. CHALCHOSIA MACULARIA.

Alæ oblongæ, utrinque nigræ, virescente cyaneoque micantes; anticæ apice fasciis duabus macularibus albis supra et infra; posticæ sublus maculis albis submarginalibus.

Gynautocera macularia, *Guér. Voy. Delessert, Hist. Nat.* 83, pl. 25, f. 2.

Malay.

Genus 51. PIDORUS.

Corpus mediocriter longum et validum, fere lineare et cylindricum. Caput antice subconico-truncatum. Palpi capite multo breviores; articulus 3us acuminatus, 2o multo brevior. Antennæ *maris* latissime pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen alarum margines posticos attingens. Pedes graciles; tibiæ posticæ calcaribus duabus apicalibus minimis. Alæ sat latæ, anticarum venæ 1a et 2a inferiores basi fere contiguæ, 2a superior trifurcata.

Zygæna, p., *Fabr.*
Callimorpha? p., *Westw.*

Body moderately long and stout, nearly linear and cylindrical. Head truncate and very slightly prominent in front. Palpi much shorter than the head; third joint pointed, much shorter than the second. Antennæ very deeply pectinated in the male, moderately pectinated in the female. Abdomen extending about as far as the hind wings. Legs slender; hind tibiæ with two very minute apical spurs. Wings moderately broad. Fore wings with four superior veins, second trifurcate, and four inferior veins, first and second nearly contiguous at the base.

1. PIDORUS GLAUCOPIS.

Nigra; caput et thorax antice coccinea; antennæ cyaneæ; alæ anticæ fascia obliqua nivea.

——— ——— *Drury, Ins. Exot.* ii. 11, pl. 6, f. 4.
Phalæna (Bombyx Spiril.) Glaucopis, *Drury, App.* ii. *Cram. Pap. Exot.* iv. 68, pl. 322, f. D.
Zygæna Glaucopis, *Fabr. Sp. Ins.* ii. 164, 37; *Mant. Ins.* ii. 105, 45; *Ent. Syst.* iii. 1, 400, 47.
Sphinx Zygæna, *Gmel. ed. Syst. Nat.* i. 5, 2397, 140.
Callimorpha? Glaucopis, *Westw. ed. Drury*, ii. 14, pl. 6, f. 4.

a. North India. From Mr. L. James' collection.
b. Silhet. Presented by E. Doubleday, Esq.
c. Silhet. From the Rev. J. Stainforth's collection.

2. Pidorus Zelica.

Cyaneo-purpurea, subtus albida ; thorax postice albidus; abdominis segmenta albo fasciata; alæ anticæ purpureo-fuscæ basi fasciisque duabus albis; posticæ albæ fusco marginatæ. Fœm. *Abdomen supra album.*

——— Zelica, *Doubleday, MSS.*

Male. Bluish purple, whitish beneath. Thorax whitish hindward. Abdomen with white bands on the sutures of the segments. Fore wings purplish brown, white towards the base except on the fore border, and with two white bands, the first in the middle and entire, the second macular and subapical; costa blue towards the base. Hind wings white with broad brown borders, bluish gray towards the base beneath. *Female.* Abdomen white above. Wings clearer white than in the male. Hind wings wholly white towards the base beneath. Length of the body 6 lines; of the wings 20—23 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.

3. Pidorus Zenotea.

Alba ; caput, antennæ et thorax anticus viridia ; alæ anticæ fasciis tribus macularibus fuscis; posticæ macula antica margineque incompleta fuscis, maris *quoque subtus apud marginem internum fuscis.*

——— Zenotea, *Doubleday, MSS.*

White. Head, antennæ, and thorax in front green. Fore wings with three brown macular bands, the first a little before the middle, the second at three-fourths of the length, united hindward to the third which is apical. Hind wings with a brown spot in front, and partly bordered with brown, and brown also in the male along the inner border beneath. Length of the body 5½—6 lines ; of the wings 16—18 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.

Genus 52. LAURION.

Corpus fere lineare et cylindricum, brevinsculum, mediocriter validum. Caput antice convexum. Palpi brevissimi; articulus 3us minimus. Antennæ filiformes, *maris* sat late pectinatæ, *fœminæ* mediocriter pectinatæ. Abdomen alarum marginem posticum non atttingens. Pedes graciles; tibiæ posticæ calcaribus duobus minimis. Alæ latissimæ, non longæ, ex parte metallicæ; anticæ venis 1a et 2a superiore trifurcata.

Epidesma, p., *Hübn. Verz. Schmett.* 176.

Body nearly linear and cylindrical, rather short, moderately stout. Head convex in front. Palpi very short; third joint very small. Antennæ filiform, rather deeply pectinated in the male, moderately pectinated in the female. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ with two very minute spurs. Wings very broad, not long, partly metallic; first and second inferior veins of the fore wings contiguous at the base; second superior vein trifurcate.

1. LAURION METALLICA.

Viridi-metallica; alæ anticæ æneo-virides, fascia obliqua flava, subtus cupreo-fuscæ; posticæ cupreo-fuscæ, viridi variæ, macula antica flava.

Metallic green. Fore wings æneous green, cupreous brown beneath, with a yellow oblique band beyond the middle. Hind wings cupreous brown, tinged here and there with green, with a yellow spot on the fore border at two-thirds of the length. Length of the body 5 lines; of the wings 18 lines.

a—c. Silhet. From Mr. Sowerby's collection.
d. North India. From Mr. L. James' collection.
e—g. Silhet. Presented by E. Doubleday, Esq.

2. LAURION CŒNEA.

Nigro-fusca; alæ anticæ fascia obliqua flava.

Phalæna Noctua Cænea, *Drury, App.* iii. *Ill. Exot. Ins.* iii. 27, pl. 21, f. 3.
Epidesma Cænea, *Hübn. Verz. Schmett.* 176, 1824.
Callimorpha Cænea, *Westw. ed. Drury*, iii. 29, pl. 21, f. 3.

a. ——— ?

3. Laurion gemina.

Cyanea; prothorax coccineo-hirtus; alæ nigro-fuscæ; anticæ fascia lata obliqua recta lineari flava; posticæ subtus nigro-cyaneæ.

Blue. Thorax brownish blue. Prothorax clothed with crimson hairs. Palpi black. Proboscis piceous. Wings blackish brown. Fore wings with an oblique straight broad linear yellow band which ends by the tips of the hind wings. Hind wings beneath blackish blue. Length of the body 4—5 lines; of the wings 12—14 lines.

a. Hong Kong. Presented by Capt. Champion.
b. Hong Kong. Presented by J. C. Bowring, Esq.
c. North China. From Mr. Cuming's collection.
d. East Indies. From the Rev. J. Stainforth's collection.
e, *f*. Silhet. From Mr. Argent's collection.
g. North India. From Mr. L. James' collection.
h. ——— ? From Mr. Milne's collection.

Genus 53. ETERUSIA.

Fœm. Antennæ graciles, vix uniserratæ. Lingua spiralis, elongata. Palpi breves. Abdomen terebra parva exserta instructum. Alæ anticæ angustæ, integræ, vena antica apicali trifurcata, vena media etiam trifurcata, furcis fere rectis; posticæ breviores, integræ, areola elongata, apiceque venas fere rectas emittente.

Eterusia, *Hope*, *Trans. Linn. Soc. Lond.* xviii. 445; *Westw. Arcana Ent.* 18.
Papilio, p., *Linn.*
Acræa, p., *Godart.*

Body rather short and stout, nearly linear and cylindrical. Head prominent and convex in front. Palpi very much shorter than the head; third joint conical, very small. Antennæ nearly as long as the body, thickly and deeply pectinated in the male, minutely pectinated and clavate at the tip in the female. Abdomen extending as far as the hind wings. Legs rather slender; hind tibiæ with two minute apical spurs. Wings long and narrow. Fore wings with four superior and four inferior veins; second superior vein trifurcate; first and second inferior veins united for some space from the discal areolet.

1. Eterusia tricolor.

Caput atro-violaceum; antennæ nigræ, subtilissime serratæ; thorax niger, velutinus, antice et postice violaceo colore inquinatus; abdomen aurantium, annulo lo violaceo; corpus subtus cyaneo-violaceum, abdominis segmentis albo nigroque alterne variegatis; alæ anticæ nigro-olivaceæ, virides, albo maculatæ; posticæ basi aurantiæ, dimidio apicali apicem versus colore violaceo tinctæ, maculis albis insignitæ. Long. 10½ lin.; alar. 32 lin.

Eterusia tricolor, *Hope, Trans. Linn. Soc. Lond.* xviii. 445, pl. 31, f. 4. *Doubleday, Zoologist*, ii. 470. *Westw. Arcana Ent.* 18.

Assam.

Female generally larger than the male. White spots of the wings variable in number and size. Length of the body 6—10 lines; of the wings 23—32 lines.

a, b. Silhet. Presented by E. Doubleday, Esq.
c—e. Silhet. From the Rev. J. Stainforth's collection.
f. Nepaul. Presented by Major-General Hardwicke.

2. Eterusia Edocla.

Fusca, olivaceo-viridi nebulosa; caput squamarum cærulearum nitentium fasciculo ornatum; thorax maculis duabus anticis albis, lateribus cyanescentibus; alæ anticæ nigro-fuscæ, fascia lata maculari maculisque undecim albidis ornatæ, venis cæruleis; alæ posticæ cæruleo-nigræ; abdomen supra luteum, basi cyaneum, lateribus nigro guttatis, segmentis albido marginatis. Long. alar. 33 lin.

Heterusia Edocla, *Doubleday, Zoologist*, ii. 469.

a. Silhet. From Mr. Stainforth's collection.
b. North India. From Mr. Stevens' collection.
c, d. Nepaul. Presented by Major-General Hardwicke.

3. Eterusia Ædea.

Cyaneo-atra; thorax antice et pectus albo maculata; abdomen supra flavum, basi atrum, segmentis subtus albo marginatis; alæ anticæ fascia media maculisque usque ad apices albis, posticæ fasciis una lata integra alteraque subapicali maculari albis.

Papilio Ædea, *Linn. Syst. Nat.* ii. 757; *Amœn. Acad.* vi. 403, 55. *Clerck, Icon.* pl. 4, f. 2. *Fabr. Sp. Ins.* ii. 32, 132; *Mant. Ins.* ii. 16, 133; *Ent. Syst.* iii. 173, 536. *Gmel. ed. Syst, Nat.* i. 5, 2215, 68.
Acræa? Ædea, *God. Encycl. Méth.* ix. 236, 19.
Heterusia Ædea, *Doubleday, Zoologist*, ii. 469, fig.

Deep black, tinged with blue. Thorax in front and pectus with white spots. Abdomen yellow above except at the base; segments beneath with white hind borders. Fore wings with a white band before the middle, and from thence to the tips with more or less numerous white marks which vary in size from dots to large confluent spots. Hind wings with a broad white band which sometimes occupies half the length, and with a more or less incomplete macular subapical white band. Length of the body 7—9 lines; of the wings 20—29 lines.

a. Silhet. Presented by E. Doubleday, Esq.
b. Silhet. From Mr. Argent's collection.
c. East Indies. From Mr. Sowerby's collection.
d, e. Ceylon. Presented by R. Templeton, Esq.
f, g. Ceylon. Presented by the Hon. East India Company.
h, i. North China. From Mr. Cuming's collection.

4. Eterusia Risa.

Viridis; alæ anticæ olivaceo-virides, fascia lata hyalina flava, hujus margine nigro squamis cyaneis viridibusque ornato; alæ posticæ flavæ, basi cyaneo nigroque nebuloso, apice late atro; abdomen flavum, basi cyaneum, apice olivaceum, lateribus nigro guttatis. Long. alar. 16—26 lin.

Heterusia Risa, *Doubleday, Zoologist*, ii. 468.

Nepaul.

This species differs from the other *Eterusiæ* in the shape of the fore wings which are much rounded towards the tips.

a. Penang. Presented by Sir W. Norris.
b. Silhet. From Mr. Argent's collection.

5. Eterusia sublutea.

Mas. *Atra, cupreo-purpureo varia, cyaneo fasciata; antennæ cyaneæ; abdomen testaceum vitta interrupta dorsali maculisque lateralibus nigris; pedes cyanei, testaceo vittati; alæ anticæ fascia maculari flava guttisque albis, subtus cyaneo variæ; posticæ basi nigræ, antice albidæ, apud discum luteæ, maculis apices versus cyaneis albidisque.*

Male. Deep black, tinged with cupreous purple, bright blue on the head and across the thorax in front and behind. Antennæ blue; tips of the branches tawny. Abdomen testaceous, black on the disk above with testaceous bands towards the base, and a row of black spots on each side. Legs blue, with testaceous stripes. Fore wings with a band of two yellow spots before the middle, and with three or four white dots beyond; under side partly bright blue. Hind wings black at the base, whitish in front, luteous on the disk; apical half with blue and whitish spots which are most apparent beneath. Length of the body 7 lines; of the wings 22 lines.

a. Silhet. From Mr. Stevens' collection.

6. Eterusia subcyanea.

Cyanea; caput ferrugineum; thorax plerumque nigro-fuscus; abdominis segmenta fasciis posticis albis; pedes albo vittati; alæ anticæ nigro-fuscæ, fascia media maculari albida guttisque subapicalibus albidis, subtus ex parte cyaneæ, viridi purpureoque variæ; posticæ dimidio basali maculisque subapicalibus cyaneis.

Blue. Head ferruginous. Thorax mostly blackish brown. Abdomen with white bands on the hind borders of the segments. Legs with white stripes. Fore wings blackish brown, with a short band of three whitish spots in the middle, and with some whitish dots towards the tips; under side partly blue mingled with green and purple. Hind wings blue on the basal half, and with blue spots towards the tips; this colour is most prevalent on the under side. Length of the body 8 lines; of the wings 22 lines.

a. Borneo. From Mr. Low's collection.

7. Eterusia remota.

Fœm. *Viridi-cyanea; caput purpureum, postice coccineum; antennæ purpureo-cyaneæ; thorax ex parte purpureus, antice coccineus; alæ anticæ fuscæ, fascia recta lineari alba; posticæ albæ fascia marginibusque fuscis.*

Female. Greenish blue. Head purple, crimson behind. Antennæ purplish blue. Thorax partly purple, crimson in front. Fore-wings brown, with a white upright linear band beyond the middle. Hind wings white, with a brownish band; borders mostly brown, and especially so about the tips. Length of the body 6 lines; of the wings 22 lines.

a. North China. From Mr. Cuming's collection.

8. Eterusia ferrea.

Rufescente-ferruginea, subtus alba; caput et thorax viridi varia; antennæ cyaneæ; abdomen viride; pedes cyanei, subtus albi; alæ anticæ fascia obliqua subapicali albida semihyalina, subtus cyaneo maculatæ; posticæ cupreo-fuscæ viridi variæ, maculis subapicalibus albis, subtus albo cyaneoque maculatæ.

Male. Reddish ferruginous, white beneath. Head and thorax partly green. Antennæ blue. Abdomen green. Legs blue above, white beneath. Fore wings with an oblique subapical band of three whitish semihyaline spots; median and submedian veins mostly green; under side blue in front and with blue marginal spots, and with a whitish irregular stripe ending on the hind border. Hind wings cupreous brown, partly green, with white spots towards the tips; under side with the disks of the areolets mostly white, and with blue spots along the hind borders. Length of the body 6—7½ lines; of the wings 18—22 lines.

a. Hong Kong. From Mr. Harrington's collection.

9. Eterusia pulchella.

Alæ pallide flavæ; anticæ venis elatis ochraceis, margine postice striisque apicalibus ærugineis; posticæ extus nigro maculatæ; caput cinnaburinum; abdomen viridi-æneum, albo annulatum.

Chalcosia pulchella, *Kollar, Kaschmir von Von Hugel*, 461, 2.

Himalayan Mountains.

Var.? *Viridis aut cyanea, subtus alba; caput et thorax anticus coccinea, nonnunquam rufescente-alba; thorax albo bimaculatus; abdominis segmenta albo fasciata; pedes subtus albi; alæ albidæ, anticæ fusco variæ, venis flavis; posticæ maculis subapicalibus fuscis.*

Green or blue, white beneath. Head and fore part of the thorax bright red, sometimes reddish white. Thorax with a large white spot on each shoulder. Abdomen with a white band on the hind border of each segment. Legs white beneath. Wings whitish. Fore wings mostly brown towards the tips and along the hind borders, with some darker brown spots in the disk at two-thirds of the length; veins yellow. Hind wings with brown spots towards the tips which are generally pale brown. It most resembles *E. Risa* in the form of its fore wings, and the antennæ are less pectinated than in the preceding species of this genus. Length of the body 5½—7 lines; of the wings 17—19 lines.

a. East Indies. Presented by Lady S. Amherst.
b, *c*. Nepaul. Presented by Major-General Hardwicke.
d. East Indies. From Archdeacon Clerk's collection.
e. North India. Presented by E. Doubleday, Fsq.

10. Eterusia sexpunctata.

Luteo-flava; caput album, antice coccineum; palpi albi, apice fusci; antennæ cyaneæ; thorax antice coccineus; pectus album, cyaneo varium; abdomen cyaneo alboque fasciatum; pedes cyanei, albo vittati; alæ anticæ maculis duabus, posticæ una cyaneis.

——— ——— sexpunctata, *Doubleday, MSS.*

Fem. Luteous yellow. Head white, crimson and very conical in front. Palpi white, with brown tips. Proboscis piceous. Antennæ blue. Thorax crimson in front. Pectus white, partly blue. Abdomen with alternate blue and white bands, the latter colour prevailing most towards the tip. Oviduct exserted, long and slender. Legs blue, with white stripes. Fore wings with two blue dots between the second and fourth inferior veins. Hind wings with a blue dot between the second and third inferior veins. Length of the body 6—7 lines; of the wings 18—22 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.
c. Silhet. From Mr. Stainforth's collection.
d, *e*. North India. From Mr. L. James' collection.

11. ETERUSIA ELIZABETHA.

Fœm. *Luteo-flava; caput antice et antennæ cyaneo-purpurea; thorax cyaneo bimaculatus; pectus albidum, cyaneo maculatum; abdomen cyaneum, fasciis albidis; pedes nigri, coxis femoribusque albido-tomentosis; alæ maculis quatuor cyaneis.*

Female. Luteous yellow. Head bluish purple in front. Tips of the palpi and proboscis black. Antennæ bluish purple. Thorax with a blue spot on each shoulder. Pectus whitish, with blue spots. Abdomen blue, with a whitish band on each segment. Legs black; coxæ and femora with whitish tomentum. Fore wings fringed with black towards the tips, with a small blue mark at the tip of the costa, and with four blue spots in the disk; three spots form two clusters which make an angle, the one with two large spots, the other with two small spots. Hind wings also with four blue spots. Length of the body 7½ lines; of the wings 22 lines.

a. North China. From Mr. Fortune's collection.

Genus 54. PSAPHIS.

Eterusiæ affinis; caput minus conicum; antennæ *maris* ramis brevioribus; abdomen brevius; alæ anticæ plus angustatæ et acuminatæ; posticæ breviores et latiores. *Mas.* Corpus sublineare, sat breve et validum. Caput antice convexum. Antennæ mediocriter pectinatæ. Abdomen subdepressum. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus minimis. Alæ angustæ, sat acuminatæ; posticæ rotundatæ, anticis multo latiores et breviores, abdomen longe superantes, venis quatuor inferioribus valde arcuatis.

Nearly allied to *Eterusia*, but the head is less conical in front, the antennæ of the male are less deeply pectinated, the abdomen is shorter, the fore wings are narrower and more pointed, and the hind wings are shorter and broader. *Male.* Body nearly linear, rather short and stout. Head convex in front. Antennæ moderately pectinated. Abdomen rather depressed, not extending near so far as the hind wings. Legs slender; hind tibiæ with two very minute apical spurs. Fore wings narrow, somewhat pointed, obtusely angular behind; second superior vein triramose, united with the first for some space from the base; first and second inferior veins united for some space from the base. Hind wings rounded, very much broader and shorter than the fore wings; discal areolet very broad; the four inferior veins much curved.

1. PSAPHIS CAMADEVA.

Nigro-purpurea; caput et thorax subtus albida; antennæ purpureæ; abdomen maculis lateralibus ventreque luteis; pedes purpurei, subtus albidi; alæ anticæ maculis nonnullis parvis subapicalibus albidis semihyalinis, subtus maculis duabus strigaque flavis; posticæ purpureæ, marginibus nigro-fuscis, subtus flavo variæ alboque maculatæ.

——— Camadeva, *Doubleday, MSS.*

Blackish purple. Head and thorax mostly whitish beneath. Antennæ purple. Abdomen pale luteous beneath, and with pale luteous spots along each side. Legs purple, whitish beneath. Fore wings blackish brown with two small semihyaline whitish spots beyond the middle, and with five more forming a short band towards the tips; these spots are most conspicuous on the under side where there are two yellow spots near the base from whence proceeds a yellow streak. Hind wings purple with blackish brown borders; under side mostly yellow towards the base and along the inner border, and with some white spots towards the tips. Length of the body 7 lines; of the wings 23 lines.

a. Penang. Presented by Sir W. Norris.

Genus 54. TRYPANOPHORA.

This genus may perhaps be united to *Eterusia*, from which it apparently only differs in the fore wings being partly quite limpid. Kollar includes it with the *Sesii*, and it is erroneously placed with that tribe in page 3 of the first part of this Catalogue.

1. TRYPANOPHORA SEMIHYALINA.

Nigra; humeri rubro maculi; abdomen fascia lata flava; alæ anticæ dimidia parte hyalina, basi bifenestratæ; posticæ macula baseòs integra, apice tripartita hyalinis.

Trypanophora semihyalina, *Kollar, Kaschmir von Von Hugel*, 457, pl. 19, f. 1—4.

Caschmir.

2. TRYPANOPHORA TRAPOBANES.

Purpureo-nigra; antennæ purpureæ; pectus coccineum; abdomen purpureum, subtus nigrum; alæ anticæ fascia anteapicali limpida; posticæ cyaneæ, ad costam nigræ.

Purplish black. Antennæ purple. Pectus crimson. Abdomen purple, black beneath. Fore wings limpid, excepting the black-bordered veins, for full one-fourth of the length near the tips which are bluish. Hind wings blue, black along the fore border. Length of the body 5 lines; of the wings 15 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 56. SORITIA.

Mas. Corpus sublineare, breve, sat validum. Caput antice conicum. Palpi capite valde breviores; articulus 3us minimus. Antennæ late et dense pectinatæ. Abdomen subdepressum, alarum margines posticos attingens. Pedes gracillimi; tibiæ posticæ calcaribus duobus apicalibus minimis. Alæ angustæ, longiusculæ; anticæ vix angulatæ; posticæ venis 3a et 4a valde arcuatis.

Chalcosia, p., *Kollar.*

Male. Body nearly linear, short, rather stout. Head conical in front. Antennæ deeply and closely pectinated. Palpi very much shorter than the head; third joint conical, very minute, much less than one-fourth of the length of the second. Abdomen somewhat depressed, extending as far as the hind wings. Legs very slender; hind tibiæ with two very minute apical spurs. Wings rather long and narrow. Fore wings hardly angular behind; second superior vein bifurcate; first and second inferior veins united for some space from the discal areolet; third and fourth remote at the base, from whence they approach each other and afterwards run parallel for most of the length. Hind wings with the third and fourth inferior veins much curved.

1. SORITIA LEPTALINA.

Purpureo-nigra, subtus albida; antennæ purpureæ; thorax antice coccineus, maculis humeralibus flavis; pedes subtus albi; alæ anticæ dimidio basali flavo aut flavo vittato, maculaque antica apicem versus flava; posticæ flavæ, nigro marginatæ.

Chalcosia leptalina, *Kollar, Kaschmir von Von Hugel*, 462, 3.

Purplish black, mostly whitish beneath. Antennæ purple. Thorax crimson along the fore border, with a yellow spot on each shoulder. Legs white beneath. Fore wings yellow, excepting the borders, for full half the length from the base, and with a small yellow spot near the fore border at three-fourths of the length; on the under side there is also a whitish curved subapical band. Hind wings yellow, black at the tips and along the adjoining part of the hind border; under side yellow about the tips with the exception of two black spots. Length of the body 4—5 lines; of the wings 13—15 lines.

Var. β. Yellow part of the fore wings contracted on each side so as to form a stripe terminated by a band. Hind wings with a blackish streak in front and another behind; black borders very broad, testaceous on the under side.

Var. γ. Like *Var.* β. Hind wings yellowish white with black borders above and with black subapical spots beneath.

a. Silhet. From Mr. Argent's collection.
b, *c*. Silhet. Presented by E. Doubleday, Esq.
d—*f*. Nepaul. Presented by Major-General Hardwicke.
g, *h*. ——— ?

2. Soritia? hyalina.

Nigra; alæ hyalinæ albæ; anticæ apice vitreæ, venis obscurioribus.

Chalcosia hyalina, *Kollar, Kaschmir von Von Hugel*, 462, 4.

Himalayan Mountains.

Genus 57. CHELURA.

"Caput antice angustum, postice latius. Lingua spiralis subelongata. Palpi breves. Antennæ ante oculos insertæ, bipectinatæ. Thorax convexus, magnitudine mediocri. Abdomen subcylindricum, annulis ad apicem magnitudine decrescentibus, octono minori; cauda *maris* forcipe acuto armata, et in parte media duplici hamo instructa; alæ angustæ, marginibus posticis subemarginatis; pedes simplices."

Chelura, *Hope, Trans. Linn. Soc. Lond.* xviii. 444. *Westw. Arcana Ent.* 19.

Antennæ of the male deeply pectinated, of the female moderately pectinated. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ without spurs. Wings semihyaline. Fore wings with four superior and four inferior veins; second superior vein trifurcate; first and second inferior veins united for some space from the discal areolet.

1. CHELURA BIFASCIATA.

Nigra; abdomen apice testaceum; alæ cinereo-hyalinæ, apice obscuriores, basi nigræ; anticæ fasciis duabus fulvis nigro cinctis.

Chelura bifasciata, *Hope, Trans. Linn. Soc. Lond.* xviii. 444.

"*Straminea; caput nigrum; antennæ concolores; thorax tuberculatus, glaber, nitidus; abdomen annulis septem primis obscure atris, octano rubro-piceo, cauda concolori; corpus subtus nigrum, nitidum, segmentis ultimis abdominis forcipe hamoque aurantiis; alæ pallide flavæ, anticæ fasciis binis aurantiis insignitis notatæ fasciisque nigris utrinque positis; pedes picei.*"

Assam.

a—d. Nepaul. Presented by Major-General Hardwicke.

Genus 58. AGALOPE.

Mas et Fœm. Corpus gracile, sublineare, longiusculum. Caput antice convexum. Palpi brevissimi, capitis dimidio non longiores; articulus 3us minimus. Antennæ filiformes, *maris* sat late pectinatæ, *fœminæ* subserratæ. Pedes gracillimi; tibiæ posticæ calcaribus duobus apicalibus minimis. Alæ anticæ latæ, costa convexa, margine apicali obliqua, angulo postico rotundato, venis 1a et 2a inferioribus basi conjunctis, 3a arcuata; alæ posticæ latissimæ.

Male and Female. Body slender, nearly linear, rather long. Head convex in front. Palpi very short, not more than half the length of the head; third joint very small. Antennæ filiform, rather deeply pectinated in the male, serrated or minutely pectinated in the female. Legs very slender; hind tibiæ with two very minute apical spurs. Fore wings broad, convex in front, oblique along the

apical border; hind angle rounded; second superior vein trifurcate, curved; first and second inferior veins united for a short space from the discal areolet; third curved, a little nearer to the fourth than to the second. Hind wings very broad, extending far beyond the abdomen; second inferior vein twice further from the third than from the first; third a little nearer to the second than to the fourth.

1. AGALOPE BASALIS.

Nigra; antennæ nigro-virides; abdomen apice subtus testaceum; pedes obscure testacei, cano-tomentosi; alæ albidæ, subhyalinæ; anticæ basi luteæ, fascia discali et triente apicali cinereis albido quadrimaculatis, venis nigris; posticæ anticis multo latiores, venis albis.

Male and Female. Black. Antennæ greenish black. Abdomen testaceous at the tip beneath. Legs dark testaceous with hoary tomentum. Wings whitish. Fore wings luteous at the base; discal band and apical third part gray including one complete and two or three incomplete whitish spots; veins black. Hind wings much broader than the fore wings; veins white. Length of the body 4½—5 lines; of the wings 16—19 lines.

a—c. North India. From Mr. Stevens' collection.
d. North India. From Mr. Argent's collection.

Genus 59. RETINA.

Mas. Corpus sat gracile, sublineare, fere cylindricum, longitudine mediocri. Caput antice convexum, non conicum. Palpi capite valde breviores; articulus 3us acuminatus, minimus. Antennæ subpectinatæ. Abdomen alas posticas paullo superans Pedes graciles; tibiæ posticæ calcaribus duabus apicalibus minimis. Alæ longiusculæ, sat angustæ, subfusiformes, non angulatæ; anticæ vena 3a superiore trifurcata, 1a et 2a inferioribus apud baseos conjunctis.

Male. Body rather slender, moderately long, nearly linear and cylindrical. Head convex in front, not conical as in *Eterusia*. Palpi very much shorter than the head; third joint pointed, very minute. Antennæ slightly pectinated. Abdomen extending for nearly one-fourth of its length beyond the hind wings. Legs slender; hind tibiæ with two extremely minute apical spurs. Wings rather long and narrow, nearly fusiform, not angular; third superior

vein of the fore wings trifurcate; first and second inferior veins united for some space from the discal areolet.

1. RETINA RUBRIVITTA.

Nigro-viridis, subtus cana; caput postice et thorax antice coccinea; alæ anticæ coccineo vittatæ.

Blackish green, hoary beneath. Head crimson behind. Antennæ black. Thorax crimson in front. Legs black, hoary beneath. Wings grayish beneath. Fore wings with a crimson stripe which occupies half the breadth, and extends along the fore border for nearly two-thirds of the length, and is thence slightly inclined to the hind border, and is there slightly hooked. Length of the body 5 lines; of the wings 14 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.

2. RETINA COSTATA.

Nigra; caput et thorax anticus rosea; alæ anticæ vitta antica apicem versus arcuata rosea.

Black. Head and fore part of the thorax clothed with rosy hairs. Fore wings with a rosy stripe along two-thirds of the fore border, beyond which it curves downward and forms an oblique band ending at the tips of the hind wings. Length of the body 7 lines; of the wings 20 lines.

a. North China. From Mr. Cuming's collection.

Genus 60. ARTONA.

Mas. Corpus breviusculum, sat validum. Caput antice subconicum. Palpi capite multo breviores; articulus 3us minimus. Antennæ validæ, setaceæ, latissime pectinatæ, corpore paullo breviores. Abdomen alas posticas fere dimidio superans. Alæ breves, angustæ; anticæ ad costam non convexæ, postice angulatæ, venis inferioribus basi sat approximatis.

Male. Body rather short and stout. Head convex and slightly conical in front. Palpi very much shorter than the head; third joint very small. Antennæ stout, setaceous, very deeply pectinated, not much shorter than the body. Abdomen extending for nearly half its length beyond the hind wings. Wings short and narrow. Fore

wings straight in front, angular behind; inferior veins rather near together at the base.

1. ARTONA DISCIVITTA.

Nigro-fusca; caput apud oculos subtusque, palpi, abdominis fasciæ dorsales et venter flava; antennæ late pectinatæ; alæ fusco-purpureæ, vittis discalibus flavis.

Male. Blackish brown. Head yellow about the eyes and beneath. Palpi yellow, extremely short. Antennæ deeply pectinated, about three-fourths of the length of the body. Wings brownish purple, with a yellow stripe in the disk of each. Abdomen yellow beneath and with a yellow band on each segment above. Length of the body 4 lines; of the wings 9 lines.

a. North India. From Mr. Stevens' collection.

Genus 61. HETEROPAN.

Mas. Corpus longiusculum, gracillimum, fere lineare et cylindricum. Caput angustum, elongatum, spina conica inter antennas armatum. Palpi gracillimi, capite multo breviores; articulus 3us conicus, minimus. Antennæ crassæ, filiformes, sat dense pectinatæ, corporis dimidio non longiores, ramis validis mediocriter longis. Abdomen alarum margines posticos vix attingens. Pedes breves, gracillimi; tibiæ non calcaratæ. Alæ breves, latæ; anticæ ad costam vix convexæ, apice vix obliquæ, venis inferioribus tribus.

Male. Body nearly linear and cylindrical, rather long, very slender. Head much longer than broad, with a slender conical protuberance between the antennæ. Palpi very slender, much shorter than the head; third joint conical, very small. Antennæ thick, filiform, about half the length of the body, rather thickly pectinated; branches stout, of moderate length. Abdomen extending hardly so far as the hind wings. Legs short, extremely slender; tibiæ without spurs. Wings short, broad, in form like those of the *Tortricidæ*. Fore wings hardly convex in front; three inferior veins, second nearer to the first than to the third at the base.

This genus has a very peculiar structure, and appears to be an aberrant form of the sub-family *Chalcosiidæ*.

1. HETEROPAN SCINTILLANS.

Glaucescens; corpus subtus auratum; antennæ cyaneæ; pedes testacei; alæ anticæ marginibus cyaneo-micantibus, costa subtus chalybea; posticæ chalybeo variæ.

Brownish lilac colour. Body gilded beneath. Antennæ blue. Legs testaceous. Fore wings with brilliant blue borders; costa chalybeous beneath. Hind wings chalybeous beneath in front and along the border, and with a chalybeous streak in the disk. Length of the body 3 lines; of the wings 8 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 62. SERIPHA.

Mas. Corpus breve, gracile. Palpi robusti, capite valde breviores; articulus 3us minimus. Antennæ validæ, corporis dimidio vix longiores. Abdomen alas posticas non superans. Pedes gracillimi; tibiæ non calcaratæ. Alæ breves, mediocriter latæ; anticæ ad costam vix convexæ, postice vix angulatæ, apice obtusæ venis tribus inferioribus basi approximatis.

Male. Body short, slender. Palpi stout, much shorter than the head; third joint very small. Antennæ stout, little more than half the length of the body. Abdomen not extending beyond the hind wings. Legs very slender; tibiæ without spurs. Wings short, moderately broad. Fore wings almost straight in front, hardly angular behind, obtuse at the tips; three inferior veins, near together at the base.

1. SERIPHA CÆLICOLOR.

Cærulea.

Body, antennæ, palpi, legs and wings sky blue. Proboscis piceous. Length of the body 2½ lines; of the wings 7 lines.

a—d. Venezuela. From Mr. Dyson's collection.

Genus 63. HERPA.

Corpus fere cylindricum, sat validum, longitudine mediocri. Palpi capite multo breviores; articulus 2us 1o paullo longior; 3us

acuminatus, 2o paullo brevior. Antennæ *maris* latissime pectinatæ. Abdomen basi ad apicem attenuatum, alarum marginem posticum non attingens. Pedes graciles; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ semihyalinæ, sat latæ, non longæ; anticæ venis tribus superioribus et quatuor inferioribus, posticæ anticis vix latiores.

Body nearly cylindrical, of moderate length, rather stout. Palpi very much shorter than the head; second joint longer than the first; third pointed, a little shorter than the second. Antennæ of the male extremely deeply pectinated. Abdomen tapering from the base to the tip, not extending so far as the hind wings. Legs slender; hind tibiæ with two minute apical spurs. Wings semihyaline, rather broad, not long. Fore wings nearly as broad as the hind wings; three superior veins, second forked, its hind branch also forked; discal fold very distinct in the areolet; four inferior veins; submedian and internal veins complete. Hind wings with three superior and four inferior veins; second superior vein simple; intermedian, submedian and internal veins complete.

1. Herpa venosa.

Flava; corpus subtus, palpi, proboscis, antennæ, thoracis abdominisque suturæ, et pedes nigra; alarum venæ nigro marginatæ.

Yellow, black beneath. Palpi, proboscis, antennæ, sutures of the thorax and of the abdomen, and legs black. Wings with a narrow black fringe; veins black and with black borders. Length of the body 5 lines; of the wings 17 lines.

a, *b*. Silhet. From Mr. Stainforth's collection.
c, *d*. Silhet. Presented by E. Doubleday, Esq.

Genus 64. MEVANIA.

Fœm. Corpus breviusculum, sat validum, fere lineare, subcylindricum. Caput parvum. Palpi porrecti, capite paullo breviores; articulus 3us acuminatus, 2o duplo brevior. Antennæ graciles, setaceæ, serratæ aut subpectinatæ. Abdomen subfusiforme, alas posticas non attingens. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus minimis. Alæ subangustæ, mediocriter longæ; anticæ vix angulatæ, venis 1a et 2a inferioribus apud bascos conjunctis, 3a superiore trifurcata.

Fem. Body nearly linear and cylindrical, moderately stout, rather short. Head small, much narrower than the thorax. Palpi

porrect, a little shorter than the head; third joint acuminated, about half the length of the second. Antennæ slender, setaceous, serrated, or very minutely pectinated. Abdomen not extending beyond the hind wings, nearly fusiform. Legs slender; hind tibiæ with two very minute apical spurs. Wings rather narrow, of moderate length. Fore wings hardly angular; third superior vein trifurcate; first and second inferior veins united for some space from the discal areolet.

1. Mevania quadricolor.

Nigra, subtus cyaneo alboque varia; caput postice et thorax antice lutea; thorax cyaneo bivittatus; abdomen fasciis dorsalibus cyaneis ventralibus albis; pedes subtus albi; alæ flavo unifasciatæ, anticæ basi cyaneo strigatæ.

Black; under side mostly metallic blue and white. Head blue in front, luteous behind. Thorax luteous in front, with some blue marks on the disk, and with a blue stripe on each side. Hind borders of the abdominal segments with blue bands above and with white bands beneath. Legs white beneath. Fore wings with some blue streaks at the base, with a pale yellow subfusiform band a little before the middle, not extending to the hind border. Hind wings with a pale yellow obconical band, extending to nearly two-thirds of the breadth from the hind border. Length of the body 4½ lines; of the wings 14 lines.

a. Venezuela. From Mr. Dyson's collection.

2. Mevania? subcyanea.

Atra; caput et thorax albo guttata; abdomen rufo bivittatum, subtus albo bivittatum; alæ apicibus exceptis subtus, posticæ quoque supra læte cyaneæ; anticæ macula oblonga basali rufa guttisque duabus costalibus quinque apicalibus limpidis; posticæ guttis duabus apicalibus limpidis.

Deep black. Head and thorax with white dots. Palpi white beneath. Antennæ wanting. Abdomen with a red stripe on each side, and with two interrupted white stripes beneath. Legs with white bands. Wings beneath and hind wings also above brilliant blue except towards the tips. Fore wings with an oblong red spot at the base of the costa, with two limpid dots by the middle of the costa, and with five limpid dots forming an undulating band near

the tips. Hind wings with a limpid spot and a limpid dot near the tips. Length of the body 4½ lines; of the wings 13 lines.

a. ———? Presented by E. Doubleday, Esq.

This species may form a new genus.

Genus 65. HYPSA.

Corpus sat gracile, sublineare. Caput mediocre. Oculi extantes. Palpi ascendentes, capite longiores; articulus 3us gracilis, linearis, elongatus. Antennæ graciles, setaceæ, *maris* sæpe pectinatæ. Proboscis longa. Pedes longi; tibiæ posticæ calcaribus quatuor longis. Alæ plerumque longæ.

Phalæna Noctua, p., *Linn.; Gmel.*
Phalæna Bombyx, p., *Fabr.; Gmel.*
Noctua, p., *Fabr.*
Erebus, p., *Latr.*
Hypsa, Damalis, Euplocia et Neochera, *Hübn. Verz. Schmett.* 172, 1173.
Aganaides et Aganais, *Boisd. Faune Ent. de Madagascar, &c., Lep.* 96.

Allied to the *Noctuidæ*. Body rather slender, nearly linear. Palpi ascending, a little longer than the head; second joint nearly thrice the length of the first; third linear, long, much more slender than the second. Antennæ slender, setaceous. Fore tibiæ of the male dentate beneath. Hind tibiæ armed with four long spurs.

Group 1. PERIDROME.

Antennæ in utroque sexu simplices, corporis dimidio paullo longiores, *maris* pubescentes. Alæ *maris* latissimæ, apice obtusæ aut subquadrato rotundatæ; anticæ *maris* apud costam pilosissimæ et subtuberculatæ, posticæ anticis vix breviores.

Antennæ simple in both sexes, pubescent in the male, a little more than half the length of the body. Wings of the male very broad, obtusely or subquadrately rounded at the tips. Fore wings of the male very hairy and somewhat tuberculate in front. Hind wings nearly as long as the fore wings.

Fœm.? Alæ mediocriter latæ, sublanceolatæ, apice subacuminatæ; posticæ anticis multo breviores.

Wings of moderate breadth, sublanceolate, slightly pointed at the tips. Hind wings much shorter than the fore wings.

1. HYPSA ORBICULARIS.

Mas. *Lutea, nigro maculata; caput album, nigro varium; pedes nigri; alæ anticæ murinæ, macula postica fusca, basi luteæ nigro maculatæ; posticæ testaceæ.*

Luteous. Head white above with black marks. Palpi and antennæ black, the former white beneath. Proboscis tawny. Thorax with two black dots in front, and a black spot on each side between the fore wings, and a tuft of white hairs behind. Pectus with white hairs. Abdomen with a row of black spots; tip clothed with brown and white hairs; under side with two rows of black spots, which are sometimes indistinct. Legs black; femora with white hairs. Fore wings mouse-colour, luteous with black spots near the base, and with a white spot on the hind border adjoining the luteous part; under side white in front, pale testaceous behind with mouse-coloured or brown borders, and with a brown streak near the base which is luteous. Hind wings pale testaceous, pale luteous towards the base and along the inner border, and with a large triangular brown spot and a brown dot by the hind border; under side with the basal half luteous with black spots, the apical half mouse-colour with whitish veins. Length of the body 12—13 lines; of the wings 32—34 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.
c. Silhet. From the Rev. J. Stainforth's collection.

Fœm.? *Lutea, nigro maculata; caput nigrum, albo varium; pedes nigri, albo strigati; alæ luteæ, marginibus latissimis murinis albo venosis.*

Luteous. Head white above with black marks. Palpi and antennæ black. Proboscis tawny. Thorax with two black dots in front, and a black spot on each side between the fore wings, and a tuft of white hairs behind; occasionally also with a black streak and a reddish band between the dots and the spots. Abdomen with three rows of black spots; under side white with two rows of black spots. Legs black, streaked with white. Wings luteous with black spots which are largest along the white costa of the fore wings; borders mouse-colour with white veins; these borders occupy nearly

half the length in the fore wings, and have there between them and the luteous part a white interval which communicates with a white spot on the hind border. Length of the body 11—12 lines; of the wings 31—34 lines.

a, *b*. North India. From Mr. L. James' collection.
c. ——— ?

Group 2. ANAGNIA.

Mas. Palporum articulus 3us 2i dimidio brevior. Antennæ pubescentes, apud medium subplumosæ. Alæ anticæ pilosæ, mediocriter latæ, vix acuminatæ; posticæ anticis breviores et multo latiores, ad costam valde convexæ, disco fasciculatæ.

Third joint of the palpi less than half the length of the second. Antennæ of the male pubescent, slightly plumose and apparently dilated a little beyond the middle, a little more than half the length of the body. Fore wings of moderate breadth, hardly acuminated at the tips, hairy except towards their tips. Hind wings shorter and much broader than the fore wings, very convex on the fore border, and with a large patch of hairs on the disk, slightly and obliquely truncated in front of the tips.

Fœm.? Palporum articulus 3us 2i dimidio multo longior. Antennæ simplices. Alæ anticæ paullo plus acuminatæ, non pilosæ; posticæ anticis multo breviores vix latiores, vix truncatæ, apud costam non convexæ, plaga discali nulla.

Female? Fore wings a little more pointed than those of the male, not hairy. Hind wings much shorter and hardly broader than the fore wings, hardly truncated, not convex in front, without a discal patch. Third joint of the palpi much more than half the length of the second.

2. HYPSA SUBFASCIA.

Mas. *Lutea, nigro maculata; caput et abdomen subtus alba, nigro maculata; alæ anticæ fulvæ, ad costam et apud apices murinæ albo venosæ, basi nigro alboque maculatæ; posticæ albidæ marginibus murinis albo venosis.*

Fœm.? *Alæ anticæ dimidio basali luteo maculis nonnullis nigris albisque, dimidio apicali murino albo venoso; posticæ luteæ nigro maculatæ marginibus latis murinis albo venosis.*

Luteous. Head white with black spots. Palpi and antennæ black, the former white beneath. Proboscis tawny. Thorax with two black dots in front, with two black spots on the disk, and with a white tuft behind. Abdomen with a row of black spots; tip clothed with whitish and brownish hairs; under side with two rows of black spots. Legs black; coxæ, femora and tips of the tibiæ with white hairs. Fore wings tawny; fore borders and tips mouse-colour with white veins; costa near the base with alternate black and white spots; under side with the tawny hue much less prevalent. Hind wings whitish, testaceous towards the inner border; discal patch and borders mouse-colour, the latter with white veins, the former with a black spot in front; disk tawny beneath. Length of the body 12 lines; of the wings 30 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.

Fem.? Body, palpi, proboscis, antennæ and legs as in the male; tip of the abdomen luteous. Basal half of the fore wings luteous with black and a few white spots, the latter apparent only above; apical half mouse-colour with white veins. Hind wings luteous with black spots, and with broad mouse-coloured white-veined borders. Length of the body 11 lines; of the wings 32 lines.

a. ———?

Group 3. EUPLOCIA.

Mas et Fœm. Palporum articulus 3us linearis, 2i dimidio multo longior. Antennæ minutissime setosæ. Alæ mediocriter latæ; anticæ sublanceolatæ, subacuminatæ, posticis latitudine æquales, *maris* tegula costali latissime ciliata.

Euplocia, *Hübn. Verz. Schmett.* 172.

Male and *Female*. Third joint of the palpi linear, much more than half the length of the second. Antennæ very minutely setose. Wings moderately broad. Fore wings slightly lanceolated and pointed, as broad as the hind wings. Costa of the fore wings in the male with a folding and deeply ciliated lappet near the base.

3. Hypsa Membliaria.

Lutea, subtus alba nigro maculata ; caput nigrum, albo varium ; palpi, antennæ et pedes nigra ; proboscis fulva ; thorax et abdominis dorsum lutea, nigro maculata ; alæ fusco-schistaceæ ; anticæ apud costam et apice albo venosæ, striga basali maris *subobsoleta*, fœminæ *distincta lutea, costa basali* fœminæ *alba nigro maculata.*

Phalæna Membliaria, *Cram. Pap. Exot.* iii. 139, pl. 269, f. C. D.
Euplocia Membliare, *Hübn. Verz. Schmett.* 172, 1782.

a, *b*. East Indies. From Archdeacon Clerk's collection.
c, *d*. North India. From Mr. Warwick's collection.

Group 4. NEOCHERA.

Palporum articulus 3us 2i dimidio multo longior. Antennæ subpubescentes, corporis dimidio multo longiores. Alæ mediocriter latæ ; anticæ sublanceolatæ, subacuminatæ.

Neochera, *Hübn. Verz. Schmett.* 173.

Fem. Third joint of the palpi more than half the length of the second. Antennæ minutely pubescent, much more than half the length of the body. Wings moderately broad. Fore wings slightly lanceolate and pointed, much longer and a little narrower than the hind wings.

4. Hypsa Dominia.

Lutea ; palpi et antennæ nigra ; thorax nigro trimaculatus ; abdomen maculis dorsalibus nigris, subtus e maculis nigris bivittatum ; pedes albi, nigro vittati ; alæ anticæ schistaceæ albo venosæ ; posticæ albæ macula discali margineque maculari cyaneo-nigris.

Phalæna Dominia, *Cram. Pap. Exot.* iii. 123, pl. 263, f. A. B.
Neochera Dominia, *Hübn. Verz. Schmett.* 173, 1784.

Coromandel.

Luteous. Head partly white. Palpi and antennæ black, the former and the base of the latter white beneath. Proboscis pale testaceous. Thorax with three black spots ; hind part partly white. Abdomen with a row of black spots, white towards the base ; under

side mostly white, with two rows of black spots. Legs white, with black stripes. Fore wings pale slate-colour, with white veins; under side white, with a black stripe which varies in breadth, and extends along the fore border and includes a white streak, and terminates in an oblique band, the latter is connected behind with an apical band of the same colour. Hind wings white with a macular bluish black border, and a bluish black discal spot. Length of the body 10—11 lines; of the wings 30—34 lines.

a. East Indies. From Archdeacon Clerk's collection.
b, *c*. North India. From Mr. L. James' collection.
d. Silhet. From the Rev. J. Stainforth's collection.
e. Java. From the Hon. East India Company's collection.

5. Hypsa Eugenia.

Lutea, nigro maculata; caput et thorax anticus et pectus nigra, albo varia; palpi et antennæ nigra; proboscis testacea; alæ anticæ glaucæ albo venosæ; posticæ albæ marginibus latis cyaneis albo venosis.

Phalæna Eugenia. *Cram. Pap. Exot.* iv. 235, pl. 398, f. M.
Neochera Eugenia, *Hübn. Verz. Schmett.* 173, 1783.

Amboina.

Group 5. HYPSA.

Palporum articulus 3us 2do multo brevior. Antennæ *maris* subpectinatæ, *fœminæ* subsetosæ. Alæ sat angustæ, anticæ murinæ, posticæ albæ.

Hypsa, p., *Hübn. Verz. Schmett.* 172.

Third joint of the palpi much shorter than the second. Antennæ of the male minutely pectinated, of the female beset with short bristles. Wings rather narrow. Fore wings mostly mouse-colour. Hind wings mostly white.

6. Hypsa Dama.

Thoraæ luteus; abdomen luteum, nigro punctatum; alæ anticæ fuscæ, basi lutea nigro punctata, vittaque longitudinali medio dilatata alba; posticæ albæ, margine nigro.

Noctua Dama, *Fabr. Sp. Ins.* ii. 216, 39; *Mant. Ins.* ii. 141, 51; *Ent. Syst.* iii. 2, 22, 69. *Donov. Epit. Ins. New Holl.*

Phalæna Noctua Dama, *Gmel. ed. Syst. Nat.* i. 5, 2545, 1049.
Aganais Dama, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 250, 3.
New Guinea, and several islands of the Pacific.

7. Hypsa Silvandra.

Var.? *Lutea; palpi et antennæ nigræ; thoraæ nigro bimaculatus; abdomen maculis aut fasciis dorsalibus nigris, subtus e maculis nigris bivittatum; pedes fusci, subtus albidi; alæ anticæ murinæ, basi luteæ nigro alboque notatæ, striga discali alba; posticæ albæ murino marginatæ.*

Phalæna Lithosia Silvandra, *Cram. Pap. Exot.* iv. 155; pl. 369, f. D.
Hypsa Silvandra, *Hübn. Verz. Schmett.* 172.
Coromandel.

Male. Luteous. Palpi black; first and second joints luteous beneath. Proboscis testaceous. Antennæ black. Thorax with a black spot on each side between the fore wings. Abdomen with black bands above; under side with two rows of black spots. Legs whitish, brown above. Fore wings mouse-colour, luteous at the base by which there are some black and white marks; disk with a white stripe which widens outward and varies in length and breadth. Hind wings white with broad mouse-colour borders.

Female. Abdomen with a row of black spots above. Legs white with black stripes. Hind wings with three mouse-coloured spots in the disk, these spots are largest beneath, and there the white disks are streaked with black. Length of the body 7—9 lines; of the wings 24—26 lines.

Var. β. Hind wings with only one mouse-coloured spot.

a. Australia. Presented by the late Earl of Derby.
b. ——— ? Presented by E. Doubleday, Esq.
c, *d.* Silhet. From Mr. Sowerby's collection.
e. Hong Kong. Presented by J. C. Bowring. Esq.

8. Hypsa plana.

Pallide lutea; palpi nigri, basi lutei; antennæ nigræ; alæ albæ murino marginatæ; anticæ basi luteo nigroque variæ, disco albo antico maculis murinis incompletis interciso; posticæ sæpe maculis nonnullis murinis.

The fore wings are of a mouse-colour towards the tips, and that colour more or less separates a spot from the white disk. The spots on the hind wings are occasionally wanting.

a. Java. From the Hon. East India Company's collection.
b, *c*. Ceylon. Presented by R. Templeton, Esq.
d. Silhet. From the Rev. J. Stainforth's collection.
e. ——— ?

9. Hypsa Monycha.

Albida; caput et thorax anticus fusca; alæ anticæ fuscæ, basi albæ fusco maculatæ, fascia discali e basi usque ad medium alba; posticæ albæ, fusco marginatæ.

Phalæna Monycha, *Cram. Pap. Exot.* iv. 52, pl, 131, f. C.

Coromandel.

This species much resembles *H. plana*, but the stripe on the fore wings is much shorter, and is not divided, and the brown border of the hind wings is much indented.

10. Hypsa intacta.

Mas. *Fusca; thorax nigro bimaculatus; abdomen segmentis nigro fasciatis, subtus e maculis nigris bivittatum; pedes albi fusco vittati; alæ anticæ basi maculis nigris albido cinctis; posticæ albæ fusco marginatæ.*

Male. Brown. Palpi black; second joint testaceous beneath. Proboscis pale testaceous. Antennæ black. Thorax with a black spot on each side in front. Abdomen with black bands on the fore borders of the segments; under side with two rows of black spots. Legs white with brown stripes. Fore wings with a few black whitish bordered spots at the base and with a whitish occasionally obsolete streak in the disk. Hind wings white with broad brown borders, adjoining which there is a brown spot in front beneath. Length of the body 8 lines; of the wings 24 lines.

a. Java. From the Hon. East India Company's collection.
b—*d*. Java. From Mrs. Henry's collection.
e. ———? Presented by the Entomological Club.

Group 6. ASPA.

Palporum articulus 3us 2o æqualis. Antennæ *maris* late pectinatæ, *fœminæ* subsetosæ. Alæ anticæ murinæ, posticæ albæ.

Hypsa, p., *Hübn. Verz. Schmett.* 172.

Third joint of the palpi as long as the second. Antennæ of the male deeply pectinated, of the female beset with minute bristles. Fore wings mouse-colour. Hind wings white.

11. Hypsa Heliconia.

Lutea; thoraæ nigro biguttatus; abdomen subtus maculis nigris bivittatum; pedes albi nigro vittati; alæ anticæ murinæ, basi luteæ et nigro maculatæ, subtus nigræ strigis albis; posticæ albæ, nigro strigatæ, maculatæ et marginatæ.

Phalæna Noctua Heliconia, *Linn. Syst. Nat.* i. 839, 112; *Mus. Lud. Ulr.* 384. *Gmel. ed. Syst. Nat.* i. 5, 2553, 112.
Hypsa Heliconia, *Hübn. Verz. Schmett.* 172, 1778.

Female. Var. a. Body, palpi, proboscis, antennæ, and legs as in the male. Abdomen not white towards the base beneath. Fore wings mouse-colour, white along the hind border, luteous with black spots at the base; under side black, with some white streaks near the base and in the disk. Hind wings white with black white-spotted borders, and in the disk with blackish streaks and with three large black spots; under side with the black parts much more prevalent.

Var. β. Fore wings beneath white with two black spots; apical third part mouse-colour. Hind wings with the black part much diminished in size.

Male? Luteous. First joint of the palpi white with a black tip; second black at the tip; third black. Proboscis testaceous. Antennæ black. Thorax with a black dot on each side between the fore wings. Abdomen beneath with two rows of black spots, white towards the base. Legs white with black stripes. Fore wings mouse-colour, luteous mingled with white and adorned with black dots at the base and along more than one-third of the costa; under side for more than one-third of the length from the base with a few black spots and along the fore border with a testaceous tinge. Hind

wings white with black borders which are broad at the tips and widened around an included white spot. Length of the body 9 lines; of the wings 26—30 lines.

a, *b*. Silhet. From Mr. Sowerby's collection.
c. East Indies. From Archdeacon Clerk's collection.
d, *e*. North India. From Mr. L. James' collection.

Group 7. DAMALIS.

Palporum articulus 3us 2o paullo brevior (*Mas*) aut ei æqualis (*Fœm.*) Antennæ *maris* subpectinatæ, *fœminæ* subsetosæ. Alæ sat angustæ, plerumque flavæ aut cervinæ.

Damalis, *Hübn. Verz. Schmett.* 172, 1780.
Rhodogastria, p., *Hübn. Verz. Schmett.* 172.

Third joint of the palpi a little shorter than the second in the male, as long as the second in the female. Antennæ minutely pectinated in the male, beset with short bristles in the female. Wings rather narrow, mostly yellow or fawn-colour.

12. Hypsa egens.

Lutea; palpi apice et antennæ nigra; thorax nigro biguttatus; abdomen maculis dorsalibus nigris, subtus e maculis nigris bivittatum; pedes albi, nigro vittati; alæ anticæ guttis basalibus nigris venisque albis; subtus maculis duabus anticis nigris; posticæ subtus maculis discalibus nigris.

Luteous. Second joint of the palpi with a black spot at the tip; third joint black. Proboscis testaceous. Antennæ black. Thorax with a black dot on each side between the fore wings. Abdomen with a row of black spots; under side with two rows of black spots. Legs white, striped with black. Fore wings with four or five black dots at the base; veins white; under side with two black spots in front, one at one-third, the other at half the length. Hind wings with from one to six black spots in the disk beneath. Length of the body 8—9 lines; of the wings 26 lines.

a, *b*. North India. From Mr. L. James' collection.
c. Silhet. From Mr. Argent's collection.
d. East Indies.
e, *f*. Java. From Mr. Henry's collection.

13. Hypsa Caricæ.

Lutea, nigro guttata; alæ anticæ subcinereæ albo venosæ, macula discali alba; basi supra lutea nigro guttata, dimidio basali subtus luteo nigro maculato; alæ posticæ nigro maculatæ, apud marginem anticum apicalem cinereæ.

Noctua Caricæ, *Fabr. Ent. Syst.* iii. 2, 27, 63. *Donov. Epit. Ins. New Holl.* pl.
Noctua Alciphron, *Cram. Pap. Exot.* ii. 58, pl. 133, f. E.
Aganais Caricæ, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 248, 1.
Hipocrita vulgaris Caricæ, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Veræ*, vi. *Hipocritæ*, C. *Vulgares*, b, f. 1—4.
Damalis Caricæ, *Hübn. Verz. Schmett.* 172, 1780.

Bengal. Java. Amboina. New Guinea.

The discal mark on the fore wing varies in size from a dot to a stripe of one-fourth of the length of the wing, and the row of black spots on the borders of the hind wings is sometimes wanting.

a—c. North India. From Mr. L. James' collection.
d. Java. From Mrs. Henry's collection.
e, f. East Indies. From Archdeacon Clerk's collection.
g, h. ———? Presented by E. Doubleday, Esq.
i, j. Ceylon. Presented by R. Templeton, Esq.
k. Java. From the Hon. East India Company's collection.
l. Penang. Presented by Sir W. Norris.

14. Hypsa Javana.

Flava; palpi macula basali apiceque nigris; antennæ nigræ; thorax nigro biguttatus; abdomen nigrum, subtus et apice luteum; pedes albidi, vittis nigricantibus; alæ discis fuscis, anticæ basi nigro guttatæ, apud discum albo bimaculatæ.

Phalæna Javana, *Cram. Pap. Exot.* iii. 146, pl. 274, f. C.

Java.

Yellow. Head pale luteous. Palpi pale luteous, with black tips, and with a black spot on the outside of each near the base. Proboscis testaceous. Antennæ black. Thorax with a black dot on each side by the base of the fore wing. Abdomen black above, pale luteous at the tip; under side pale luteous, with a row of black

dots on each side. Legs whitish; coxæ luteous; femora and tibiæ with blackish stripes. Fore wings brown, yellow at the base, along the fore border, and for about one-third of the length from the tips; several black dots at the base; two white spots in the brown part at one-third of the breadth from the fore border, the second larger than the first, beyond it the brown part emits a lanceolate streak towards the tip of the wing. Hind wings brown with broad yellow borders; under side with a curved yellow streak in the disk. Length of the body 9 lines; of the wings 27 lines.

a. East Indies. From Archdeacon Clerk's collection.

15. Hypsa Mauritia.

Cervina; thorax nigro maculatus; abdomen rufum maculis lateralibus rufis; pedes rufi; alæ anticæ apud discum pallidiores; posticæ albidæ margine lata cervina.

Phalæna Mauritia, *Cram. Pap. Exot.* iv. 105, pl. 345, f. B.
Rhodogastria Mauritia, *Hübn. Verz. Schmett.* 172, 1775.

Mauritius.

16. Hypsa chloropyga.

Læte testacea; palpi et antennæ nigricantes; thorax nigro biguttatus; abdomen fasciis tribus anticis apiceque nigro-viridibus; pedes cani, nigro varii; alæ anticæ guttis duabus basalibus nigris maculisque quinque discalibus rufis.

Bright testaceous. Proboscis paler. Palpi and antennæ blackish. Thorax with a black dot on each side near the base of the fore wing. Abdomen above with three slender blackish green bands on the fore borders of the segments between the base and the middle, first and third band interrupted; apical segment blackish green above. Legs hoary; fore femora with black stripes; fore tibiæ and fore tarsi blackish; posterior femora testaceous. Fore wings with two black dots at the base and with five small red spots in the disk, four of them in a line nearly parallel to the fore border and the second, third and fourth nearer to it than to the hind border, the fifth nearest to the hind border and between the second and third as to distance from the base. Length of the body 11½ lines; of the wings 28 lines.

a. Australia. From the Voyage of H.M.S. Rattlesnake.

Group 8. LAGIDES.

Palporum articulus 3us 2o paullo longior (*Mas*) aut paullo brevior (*Fœm.*) Antennæ *maris* latissime pectinatæ, *fœminæ* subsetosæ. Alæ anticæ cervinæ, basi luteæ nigro alboque variæ; posticæ luteo flavæ.

Damalis, p., *Hübn. Verz. Schmett.* 172.

Third joint of the palpi a little longer than the second in the male, a little shorter than the second in the female. Antennæ of the male very deeply pectinated, of the female beset with very minute bristles. Fore wings fawn-colour, luteous and marked with black and white towards the base. Hind wings luteous yellow.

17. Hypsa Ficus.

Lutea, nigro guttata; alæ anticæ subcinereæ, albo venosæ, basi costæque triente ochraceæ nigro guttatæ albidoque maculatæ; posticæ nigro maculatæ et guttatæ.

Noctua Ficus, *Fabr. Ent. Syst.* iii. 27, 62.
Phalæna Alciphron, *Cram. Pap. Exot.* iii. pl. 262, f. A, B.
Damalis Ficus, *Hübn. Verz. Schmett.* 172, 1781.

Tranquebar.

The black spots on the hind wings vary in size and number.

a. North Bengal. Presented by W. W. Saunders, Esq.
b—d. North India. From Mr. Stevens' collection.
e. Ceylon. Presented by R. Templeton, Esq.
f ——— ?

Group 9. PHILONA.

Fœm. Palporum articulus 3us 2i dimidio brevior. Antennæ subsetosæ. Alæ anticæ pallide cervinæ venis albis, posticæ flavæ apice fuscæ.

Female. Third joint of the palpi less than half the length of the second. Antennæ beset with very minute bristles. Fore wings very pale fawn-colour with white veins. Hind wings yellow with brown tips.

18. Hypsa inops.

Cervino-testacea; palpi apice et antennæ nigra; thorax nigro bimaculatus; pectus nigro maculatum; abdomen luteum, maculis dorsalibus nigris, subtus e maculis nigris bivittatum; pedes testacei, nigro venosi; alæ albo venosæ; anticæ basi luteæ nigro maculatæ, subtus apud apices et ad costam murinæ; posticæ flavæ, fusco marginatæ.

Testaceous, with a slight tinge of fawn-colour. Palpi pale testaceous; third joint and tip of the second black. Proboscis whitish testaceous. Antennæ black. Thorax with a black spot on the base of each lappet. Pectus with black spots. Abdomen pale luteous with an interrupted row of black spots; under side with two rows of black spots. Legs pale testaceous, with black stripes. Fore wings with white veins, pale luteous and with a few black spots at the base; under side whitish, pale mouse-colour along the fore border and for nearly half the length from the tips. Hind wings yellow with a broad brown border about the tips. Length of the body 7 lines; of the wings 22 lines.

a. Silhet. From Mr. Sowerby's collection.
b. Silhet. From Mr. Stainforth's collection.
c, *d*. Silhet. Presented by E. Doubleday, Esq.

Group 10. PETALIA.

Fœm. Palporum articulus 3us 2o vix brevior. Antennæ subsetosæ. Alæ anticæ fuscæ, maculis venisque pallidis; posticæ flavæ, fusco fasciatæ.

Female. Third joint of the palpi hardly shorter than the second. Antennæ beset with minute bristles. Fore wings brown, with pale marks and veins. Hind wings yellow with brown bands.

19. Hypsa plagiata.

Lutea; palpi et antennæ nigra, illorum articulo 2o luteo; thorax nigro-fusco trivittatus; abdominis segmenta nigro fasciata; pedes fusci, testaceo varii, coxis luteis; alæ anticæ fuscæ strigis basalibus testaceis et luteis, macula rotunda discali venisque testaceis; posticæ flavæ fasciis duabus nigro fuscis, 1a maculari.

Luteous. Palpi black, second joint mostly luteous. Proboscis testaceous. Antennæ black. Thorax with three blackish brown stripes. Abdomen with a black band on the fore border of each segment. Legs brown, partly covered with testaceous tomentum; coxæ luteous; posterior tarsi and tips of the joints of the fore tarsi testaceous. Fore wings brown with some testaceous and luteous streaks at the base and with a large nearly round testaceous spot in each disk; veins testaceous; under side yellow, brown towards the tips, and with a blackish brown middle band. Hind wings yellow, with two blackish brown bands, the inner one composed of spots. Length of the body 9 lines; of the wings 26 lines.

a. New Holland. From Mr. Stevens' collection.

Group ——— ?

20. Hypsa Narcissus.

Cinereo-fusca; thorax et alæ basi nigro maculata; abdomen luteum, e maculis nigris trivittatum; alæ anticæ antice nigro-fuscæ, vitta media alba, subtus nigro-fuscæ venis apicibusque cyaneis, lunula discali alba; macula basali vittaque postica luteis; alæ posticæ testaceæ, margine interno fasciaque obliqua luteis; apices versus cyaneæ nigro marginatæ, subtus luteæ apice cyaneæ, fascia intermedia nigra.

Phalæna Narcissus, *Cram. Pap. Exot.* i. 116, pl. 73, f. E, F.
Noctua Narcissus, *Fabr. Ent. Syst.* iii. 2, 20, 37.

China.

21. Hypsa Borbonica.

Alæ anticæ fuscæ, basi fulva nigro punctata; posticæ nigræ radiis basilaribus fulvescentibus; thorax et abdomen fulva, nigro punctata; alæ subtus dimidiatim luteæ.

Aganais Borbonica, *Boisd. Faune Ent. Mad. Bourb. et Maur. Lép.* 96, 1, pl. 15, f. 1.

Bourbon. Mauritius.

22. HYPSA INSULARIS.

Luteo-fulva, nigro punctata; alæ luteæ; anticæ basi nigro punctatæ, subtus macula costali fusca.

Aganais insularis, *Boisd. Faune Ent. Mad. Bourb. et Maur. Lép.* 97, 2, pl. 15, f. 2.

H. Borbonica, *Fœm.?*

Bourbon.

23. HYPSA STRIGOSA.

Lutea; abdomen nigro punctatum; alæ quatuor subtus impunctatæ; anticæ fuscæ, basi luteæ nigro punctatæ, venis albo strigosis; posticæ luteæ impunctatæ.

Aganais radiata, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 250, 2.

New Guinea.

24. HYPSA DORYCA.

Thorax fuscus; abdomen luteum annulis nigris; alæ anticæ fuscæ, basi nigro punctatæ, lineola longitudinali, medio dilatata alba; posticæ albæ margine fusco.

Aganais Doryca, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 251, 4.

New Guinea.

25. HYPSA AUSTRALIS.

Thorax luteus; alæ quatuor subtus impunctatæ; anticæ fuscæ, basi luteæ, nigro punctatæ, maculisque duabus albis; posticæ luteæ, margine nigro.

Aganais australis, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 252, 5, pl. 5, f. 3.

New Guinea.

26. HYPSA VERSICOLOR.

Alæ quatuor fusco-cyaneæ submicantes; anticæ basi nigro albidoque punctatæ, fasciaque pone medium transversa alba; posticæ immaculatæ, subtus basi albo radiatæ.

Noctua versicolor, *Fabr. Ent. Syst.* iii. 2, 49, 134? *Donov. Epit. Ins. New Holl.*

Aganais versicolor, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 252, 6.

New Guinea.

27. Hypsa speciosa.

Fulva; alæ anticæ medio, posticæque albidæ; illæ basi fulvæ maculis sex parvis nigris, dimidio apicali obscuriore.

Phalæna Noctua speciosa, *Drury, Ill. Exot. Ent.* ii. *Appendix.*
Noctua? speciosa, *Westw. ed. Drury*, ii. 10, pl. 5, f. 2.
Sierra Leone.

28. Hypsa? Arthus Bertrand.

Cervina; caput et thorax nigro maculata; abdomen stramineum, basi et apice pallide rufescens; alæ anticæ albido-cervinæ, fascia media postice abbreviata apiceque fuscis; posticæ sordide substramineæ, apice obscuriores.

Lithosia Arthus Bertrand, *Guér. Voy. de la Coquille, Ins.* pl. 19, f. 5.
New Guinea.

Genus 66. CARYATIS.

Mas. Corpus lineare, validum, sat longum. Palpi capite longiores; articulus 2us 1o brevior; 3us 2o brevior non gracilior, apice obtusus. Antennæ gracillimæ, subsetosæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ longæ, sat angustæ; anticæ ad costam subconvexæ, postice subangulatæ.

Caryatis, p., *Hübn. Verz. Schmett.* 171.
Callimorpha? p., *Westw.*

Connects *Hypsa* with the other *Lithosii*. *Male.* Body linear, stout, rather long. Palpi longer than the head; second joint shorter than the first; third shorter but not more slender than the second, obtuse at the tip. Antennæ very slender, beset with minute bristles. Proboscis rather long. Abdomen extending for one-fourth of its length beyond the hind wings. Legs slender; hind tibiæ with four small spurs. Wings long, rather narrow. Fore wings slightly convex in front, slightly angular behind; first and second inferior veins united at the base; third very little nearer to the second than to the fourth.

1. Caryatis Phileta.

Sanguinea; thorax nigro vittatus; abdomen flavum, guttis dorsalibus nigris; alæ anticæ oblongæ fuscæ, fascia transversa pone medium alba; posticæ flavæ margine externo nigro. Long. alar. 27 lin.

Phalæna (Noctua) Phileta, *Drury, App.* iii.; *Ill. Exot. Ins.* iii. 30, pl. 22, f. 5.
Caryatis Phileta, *Hübn. Verz. Schmett.* 171, 1762.
Callimorpha? Phileta, *Westw. ed. Drury*, iii. 32, pl. 22, f. 5; *Nat. Libr. Exotic Moths*, xxxvii.

Sierra Leone.

a—*c*. Africa. Presented by E. Doubleday, Esq.
d. ———? From Mr. Milne's collection.
e. West Africa. From Mr. Hewitson's collection.
f. ———?

Genus 69. SERMYLA.

Mas. Corpus validum, lineare, mediocriter longum. Caput mediocre. Palpi validi, pilosi, capite breviores; articulus 3us linearis, 2o plus duplo brevior et gracilior. Antennæ subpectinatæ, corporis dimidio paullo longiores. Abdomen alas posticas vix superans. Pedes breves; tibiæ posticæ calcaribus duabus minutis apicalibus. Alæ sat latæ, mediocriter longæ; anticæ trigonæ, venis inferioribus 1a 2a et 3a basi approximatis, 4a remota.

Allied to the *Noctuidæ*. *Male.* Body stout, linear, moderately long. Head of moderate size. Palpi stout, hairy, shorter than the head; third joint linear, slender, less than half of the thickness and of the length of the second. Antennæ minutely pectinated, little more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs short; hind tibiæ with two minute apical spurs. Wings rather broad, moderately long. Fore wings triangular, straight in front, angular behind; first and second inferior veins nearly contiguous at the base; third full ten times nearer to the second than to the fourth.

1. SERMYLA TRANSVERSA.

Nigro-fusca; caput albo biguttatum; thorax maculis quatuor anticis flavis duabusque lateralibus luteis; abdomen subtus flavo bivittatum, apice luteum; alæ anticæ postice subcyaneæ, vitta costali fasciaque obliqua discali flavis; posticæ flavæ nigro marginatæ.

Brownish black. Head with a white dot by the base of each antenna. Antennæ black. Thorax with four yellow spots in front and with a luteous spot on each shoulder. Abdomen with a yellow

stripe on each side beneath; tip clothed with a tuft of luteous hairs on each side, and with some intermediate black bristles. Fore wings tinged with blue on the hinder part, and with a yellow stripe close to the costa, proceeding from the base, where it has a luteous tinge, to two-thirds of the length, and there terminating in an oblique yellow band; it is hardly apparent beneath where there is a luteous spot, and a yellow streak a little beyond it in the disk. Hind wings yellow, with a complete and very broad black border, which is slightly indented hindward. Length of the body 9 lines; of the wings 24 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus 68. PITANE.

Mas. Corpus lineare, validiusculum, mediocriter longum. Caput magnum. Palpi ascendentes, capite paullo longiores; articulus 2us 1o longior; 3us linearis, 2o multo brevior et gracilior. Antennæ mediocriter pectinatæ, corporis dimidio non longiores. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ anticæ subtus dentatæ; posticæ calcaribus quatuor longis. Alæ longiusculæ, subangustæ; anticæ ad costam subconvexæ, posticæ rotundatæ non angulatæ, apice subacuminatæ, vena 1a inferiore valde arcuata.

Allied to the *Noctuidæ*. *Male.* Body linear, rather stout, of moderate length. Head large. Palpi ascending, a little longer than the head; second joint longer than the first; third linear, much shorter and more slender than the second. Antennæ moderately pectinated, not more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs rather slender; fore tibiæ dentate beneath; hind tibiæ with four long spurs. Wings rather long and narrow. Fore wings slightly convex in front, rounded and not angular behind, slightly pointed at the tips; first inferior vein much curved, united to the second at the base; third full twice further from the fourth than from the second.

1. PITANE FERVENS.

Rufa; caput macula antica fusca; palpi et antennæ nigra; tibiæ tarsique fusca; alæ anticæ ferrugineæ, testaceo punctatæ, fasciisque tribus rufis fusco marginatis flavo punctatis ornatæ; posticæ fusco late marginatæ.

Red. Head with a dark brown spot before the antennæ. Palpi and antennæ black. Proboscis tawny. Abdomen pale red, with

whitish hairs towards the base. Tibiæ and tarsi brown. Fore wings ferruginous, sprinkled with testaceous atoms, adorned with three red large transverse spots with brown borders, and sprinkled with pale yellow atoms; the first at the base, the second very little before the middle, extending nearly across the wings, slightly concave on part of the outer side; the third less than half the breadth of the wing. Hind wings pale red, with broad brown borders. Length of the body 8 lines; of the wings 24 lines.

a. ———? From Mr. Children's collection.

Genus 69. PITTHEA.

Mas. Corpus sat gracile, mediocriter longum, fere lineare et cylindricum. Palpi validi, capite breviores; articulus 3us conicus, gracilis, 2o quadruplo brevior. Antennæ sat late pectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus duobus longis. Alæ latiusculæ, non longæ; anticæ vix angulatæ, venis tribus inferioribus.

Male. Body rather slender, of moderate length, nearly linear and cylindrical. Palpi stout, shorter than the head; third joint conical, slender, not more than one-fourth of the length of the second. Antennæ rather deeply pectinated. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings rather broad, not long. Fore wings hardly angular behind; three inferior veins, second nearly twice further from the third than from the first.

1. Pitthea continua.

Nigro-fusca; palpi pedesque subtus albi; alæ anticæ flavo bifasciatæ; posticæ flavo unifasciatæ.

Blackish brown. Head white in front. Palpi and legs white beneath. Proboscis black. Fore wings with two slightly oblique yellow bands, the first entire, before the middle; the second abbreviated, beyond the middle. Hind wings with one yellow upright band which is attenuated hindward and forms a continuation with the first fore band. Length of the body 6—6½ lines; of the wings 14—16 lines.

a. Ashanti. From the Wesleyan Missionary Society's collection.
c—e. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 70. TERINA.

Mas. Corpus sublineare, fere cylindricum, mediocriter robustum et longum. Palpi validi, hirti, capite breviores; articulus 3us brevissimus, gracillimus, 2o quadruplo brevior. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor minutis. Alæ latæ, non longæ; anticæ postice vix angulatæ, venis tribus inferioribus.

Allied to the *Geometridæ*. *Male.* Body nearly linear and cylindrical, moderately stout and long. Palpi stout, hairy, shorter than the head; third joint very short and slender, not more than one-fourth of the length of the second. Antennæ very deeply pectinated. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four minute spurs. Wings broad, not long. Fore wings hardly angular behind; three inferior veins, the second twice further from the third than from the first.

1. TERINA LATIFASCIA.

Nigra; alæ luteæ; anticæ fascia lata media vix obliqua apiceque nigris; posticæ margine inciso nigro.

Black. Wings luteous, broad. Fore wings with black tips and with a broad nearly upright black band, which ends at the tips of the hind wings, and is connected along the hind border with the black at the tips. Hind wings with a black border which is very narrow along the inner margin and in the middle of the hind margin. Length of the body 5½ lines; of the wings 16 lines.

a, *b*. Congo. Presented by Sir J. Richardson.

Genus 71. URAGA.

Mas. Corpus sublineare, fere cylindricum, mediocriter longum et robustum. Palpi capite longiores; articulus 3us lanceolatus, 2o paullo brevior. Antennæ mediocriter pectinatæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter longæ, sat latæ; alæ anticæ postice rotundatæ non angulatæ.

Male. Body nearly linear and cylindrical, moderately long and stout. Palpi longer than the head; third joint lanceolate, a little shorter than the second. Antennæ moderately pectinated. Abdo-

men extending a little beyond the hind wings. Legs slender; hind tibiæ with four small spurs. Wings of moderate length, rather broad. "Fore wings rounded and not angular on the hind border."

1. URAGA HŒMORRHOA.

Nigra; caput et prothorax coccineo-hirta; palpi coccinei, apice nigri; abdomen cyaneum, apicem versus subtus coccineum; femora cyanea; alæ anticæ fascia angusta lineari recta subobliqua albida testaceo marginata.

Black. Head and prothorax clothed with crimson hairs. Palpi crimson, with black tips. Proboscis testaceous. Abdomen blue, crimson towards the tip beneath and with a slender crimson stripe on each side. Femora blue. Fore wings with a narrow linear straight slightly oblique whitish band with testaceous borders at two-thirds of the length. Hind wings bluish beneath towards the base. Length of the body 6½ lines; of the wings 15 lines.

a. Jamaica. From Mr. Gosse's collection.

Genus 72. CLELEA.

Mas. Corpus breve, mediocriter validum. Caput antice convexum. Palpi subarcuati, capite breviores; articulus 3us minimus. Antennæ late pectinatæ, ramis setosis. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ breviusculæ, mediocriter latæ.

Allied to the group of genera for which the name *Chalcosidæ* is proposed, but distinguished by the length of the apical spurs of the hind tibiæ. *Male.* Body short, moderately stout. Head convex in front. Palpi shorter than the head, slightly curved; third joint very small. Antennæ deeply pectinated; the branches beset with short bristles, of equal length till near the tips. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with two rather long apical spurs. Wings rather short, of moderate breadth.

1. CLELEA SAPPHIRINA.

Nigra, cyaneo varia; antennæ purpureæ; alæ anticæ vitta basali costali, fascia obliqua, vittis tribus subapicalibus lineaque marginali guttulari cyaneis.

Black. Head bright blue. Antennæ purple. Proboscis tawny. Thorax bright blue in front and with a blue stripe on each side. Pectus mostly blue. Legs blue or purple, excepting the tarsi. Fore wings with a blue stripe at the base of the costa, an oblique blue band before the middle, three blue stripes beyond, and a blue dotted line along the border. Length of the body 3½ lines; of the wings 10 lines.

a. Hong Kong. From Mr. Harrington's collection.

Genus 73. THIRMIDA.

Mas. Corpus sat gracile, mediocriter longum, fere lineare et cylindricum. Caput et thorax hirta. Palpi ascendentes, capite paullo breviores; articulus 3us gracilis, acuminatus, 2o paullo brevior. Antennæ latissime pectinatæ, ramis subsetosis apud medium longioribus. Abdomen thorace multo gracilius, alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter longæ et latæ; anticæ vix angulatæ, venis 2a et 3a inferioribus basi conjunctis.

Male. Body of moderate length, rather slender, nearly linear and cylindrical. Head and thorax hairy, the latter rather stout. Palpi ascending, a little shorter than the head; third joint slender, acuminated, a little shorter than the second. Antennæ very deeply pectinated; the branches longest in the middle, beset with short bristles. Abdomen much more slender than the thorax, extending a little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately long and broad. Fore wings hardly angular; second and third inferior veins united at the base.

1. THIRMIDA DIMIDIATA.

Cyaneo-nigra; alæ fere bistriente lutea, nigro uniguttatæ; anticæ nigro venosæ.

Bluish black. Thorax very hairy. Wings luteous for nearly two-thirds from the base, with a black dot on each near the costa and very near the border of the luteous part. Veins of the fore wings with black borders above. Hind wings quite black towards the tips above; inner border and hind border black, the former deeply fringed. Length of the body 6—6½ lines; of the wings 17—18 lines.

a. Santa Fé de Bogota. From Mr. Isaacson's collection.
b. Santa Fé de Bogota. Presented by E. Doubleday, Esq.
c. Colombia. From M. Becker's collection.

Genus 74. PHÆOCHLÆNA.

Corpus gracile, longitudine mediocri, fere lineare et cylindricum. Palpi arcuati, ascendentes, capite paullo longiores (*mas*) aut vix breviores (*fœm.*); articulus 3us minimus. Antennæ *maris* mediocriter pectinatæ, *fœminæ* graciles, simplices. Abdomen alas posticas nonnunquam paullo superans. Pedes graciles; tibiæ posticæ calcaribus mediis mediocriter longis, apicalibus parvis. Alæ mediocres, nonnunqum longiusculæ; anticæ subangulatæ, venis 1a et 2a inferioribus basi approximatis, 3a superiore trifurcata.

Phæochlæna, *Hübn. Verz. Schmett.* 176.

Has some affinity to *Josia*. Body slender, nearly linear and cylindrical, of moderate length. Palpi curved, ascending, a little longer than the head in the male, nearly as long as the head in the female; third joint very minute. Antennæ of the male moderately pectinated, of the female slender and simple. Abdomen extending as far as the hind wings, seldom a little beyond them. Legs slender; hind tibiæ with four spurs; middle pair of moderate length; hind pair small. Wings of moderate length and breadth, rather long in some species. Fore wings slightly angular; third superior vein trifurcate; first and second inferior veins near together at the base.

1. PHÆOCHLÆNA TENDINOSA.

Nigra; caput et thorax luteo varia; abdomen luteo quadrivittatum; alæ anticæ ferrugineæ, marginibus fascia obliqua media apicibusque fuscis, macula antica media guttaque subapicali luteis, subtus vitta fascia maculaque luteis, venis basim versus testaceis; posticæ nigro-fuscæ, vitta discali lutea.

Phæochlæna tendinosa, *Hübn. Samml. Exot. Schmett.* 18, 45, f. 89, 90; *Verz. Schmett.* 176, 1816.

The ferruginous space beyond the band of the wing is occasionally wanting, and the brown then occupies the greater part of the wing. On the under side the stripe extends along the hind border and occupies more than half the breadth and less than half the length of the wing, the band does not reach the hind border, and the spot corresponds to the dot above.

a—g. Honduras. From Mr. Miller's collection.
h. Honduras. From Mr. Dyson's collection.

2. Phæochlæna Privigna.

Fusca, subtus albida; caput et thorax testaceo varia; prothorax maculis duabus lateralibus luteis; alæ anticæ ferrugineæ testaceo venosæ, apices versus fuscæ fasciaque obliqua subapicali postice attenuata flava, subtus dimidio basali costa excepta oblique lutea; posticæ luteæ nigro marginatæ.

Phæochlæna Privigna, *Hübn. Samml. Exot. Schmett.* 32, 98, f. 195, 196; *Verz. Schmett.* 176, 1814.

a, b. Brazil. From Mr. Argent's collection.
c. Parà. From Mr. Bates' collection.

3. Phæochlæna Priverna.

Lutea; caput et thorax flava; alæ anticæ fuscæ, strigis basalibus fulvis, fascia postmedia arcuata flava; posticæ nigro marginatæ.

Phalæna Priverna, *Cram. Pap. Exot.* ii. 108, pl. 166, f. E.
Bombyx Priverna, *Fabr. Sp. Ins.* ii. 104, 144; *Mant. Ins.* ii. 131, 199; *Ent. Syst.* iii. 1, 480, 227. *Oliv. Enc. Méth.* v. 100, 259.
Phalæna Bombyx Priverna, *Gmel. ed. Syst. Nat.* i. 5, 2444, 588.
Phæochlæna Priverna, *Hübn. Verz. Schmett.* 176, 1815.
P. Privigna, var.?

Surinam.

4. Phæochlæna mononeura.

Nigra; abdomen vittis duabus lateralibus ventreque luteis; alæ anticæ lurido-cinereæ, linea supra discali discoque subtus luteis; posticæ luteæ, nigro marginatæ.

Hipocrita tineiformis mononeura, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Netrices* iii. *Hipocritæ A. Tineiformes*, b. f. 1—4.
Phæochlæna mononeura, *Hübn. Verz. Schmett.* 176, 1817.

5. Phæochlæna transcisa.

Pallide ferruginea; alæ anticæ fascia media sublineari recta testacea, subtus quoque altera latiore subobliqua flava; posticæ flavo late marginatæ.

Pale ferruginous. Palpi towards the base and proboscis testaceous. Fore wings with an upright straight testaceous band which tapers slightly to the hind border, and ends at the tips of the hind wings; on the under side there is also a yellow band which is dilated, irregular and slightly oblique, and encloses nearly the whole of the testaceous band. Hind wings yellow, with a black border, which is straitened by the middle of the hind margin, and is much widened at the tips. Length of the body 5 lines; of the wings 16 lines.

a, *b*. ——— ? From Mr. Children's collection.

6. Phæochlæna brevilinea.

Mas. *Nigro-fusca; abdomen flavo bivittatum; palpi subtus albidi; alæ anticæ vittis duabus, una apicem versus valde dilatata supra fusca subtus flava, altera brevi basali inclusa supra flava; posticæ quoque vittis duabus flavis, una apicem versus valde dilatata, 2a postica brevi angusta.*

This may prove to be the male of *P. divisa*. Blackish brown. Palpi whitish beneath. Abdomen with a yellow stripe on each side. Fore wings with a stripe which is brown above, yellow beneath; it becomes very broad beyond the middle, and is somewhat truncated at the tip; it includes a narrow linear pale yellow stripe which is rather more than one-third of the length of the wing from the base. Hind wings with a yellow stripe which widens from the base to near the tip, and at the base is joined to the hind stripe which is short, narrow and linear. Length of the body 5 lines; of the wings 17 lines.

a. Brazil. From Mr. Stevens' collection.

7. Phæochlæna divisa.

Fœm. *Nigro-fusca; abdominis dorsum nigrum, luteo bivittatum; pedes subtus albo vittati; alæ anticæ vitta apicem versus dilatata supra fusca subtus lutea; posticæ vitta antica apicem versus subdilatata lutea.*

Blackish brown. Abdomen black above, with two luteous stripes which taper towards the tip. Legs striped with white beneath. Fore wings with a stripe which is brown above, luteous beneath; it becomes very broad beyond the middle, and is rounded towards the tip. Hind wings with a luteous stripe which widens slightly from

the base to near the tip and is near the fore border. Length of the body 7 lines; of the wings 21 lines.

a. Brazil. From Mr. Stevens' collection.

8. Phæochlæna subapicalis.

Fusco-nigra; alæ anticæ subtus fascia lata media lutea; posticæ triente apicali lutea nigro marginata.

Brownish black. Fore wings beneath with a very broad slightly oblique luteous band, forming a continuous band with the broad subapical luteous band which appears on both sides of the hind wings. Length of the body 5—6 lines; of the wings 16—18 lines.

a, *b*. Ega, on the Amazon. From Mr. Bates' collection.

9. Phæochlæna Medarda.

Var.? *Fusca; prothorax antice rufus; abdomen nigrum, flavo bivittatum; alæ anticæ vitta una postica nigro-fusca, alteraque subtus lutea apicem versus valde dilatata; posticæ nigræ, vittis duabus luteis, una apicem versus dilatata, 2a postica angusta.*

Phalæna Medarda, *Cram. Pap. Exot.* iv. 107, pl. 345, f. F.
Phæochlæna Medarda, *Hübn. Verz. Schmett.* 176, 1818.
Surinam.

Var.? Brown. Prothorax red in front. Abdomen black, with a yellow stripe on each side. Fore wings with a blackish brown stripe extending along the hind borders from the base to the angle; under side with a slightly curved luteous stripe, which widens much from the base to three-fourths of the length, and is somewhat indented near the tip. Hind wings black, with two luteous stripes; the first widening from the base to near the tip, and occupying most of the disk, the second slender, on the inner border; two marginal luteous dots between its tip and the first stripe. Length of the body 5 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 75. VIRBIA.

Corpus breviusculum, sat validum, fere lineare, cylindricum. Palpi robusti, recti, porrecti, capite paullo breviores; articulus 3us

minimus. Antennæ in utroque sexu simplices. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus duabus apicalibus minimis. Alæ breviusculæ, latiusculæ; anticæ angulatæ, venis 1a et 2a inferioribus basi approximatis, 3a superiore trifurcata.

A link between the preceding genus and the *Noctuidæ*. Body rather short, moderately stout, nearly linear and cylindrical. Palpi stout, straight, porrect, a little shorter than the head; third joint very small. Antennæ simple in both sexes. Abdomen not extending beyond the hind wings. Legs rather stout; hind tibiæ with two very minute apical spurs. Wings rather short and broad. Fore wings distinctly angular; third superior vein trifurcate; first and second inferior veins near together at the base.

1. VIRBIA MENTIENS.

Obscure fusca; abdomen luteo bivittatum; alæ anticæ vitta subtus lutea; posticæ luteæ, nigro late marginatæ.

Dark brown. Proboscis testaceous. Abdomen with a broad luteous stripe on each side. Fore wings beneath with a luteous stripe which extends from the base to beyond half the length, and is dilated and obliquely truncated at the tip. Hind wings luteous, with broad black borders which are broadest and angular at the tip of the inner margin, the latter is luteous. Length of the body 4 lines; of the wings 13 lines.

a. Venezuela. From Mr. Dyson's collection.

2. VIRBIA LUTEILINEA.

Fusca; antennæ nigræ; abdomen luteo bivittatum; alæ anticæ plus dimidio basali supra ferrugineo subtus luteo, linea costali rufescente; posticæ luteæ, nigro late marginatæ.

Brown. Palpi at the base and proboscis testaceous. Antennæ black. Abdomen on each side with a slight luteous stripe which tapers from the base towards the tip. Fore wings ferruginous above and luteous beneath for more than half the length from the base, and with a reddish line along the costa. Hind wings luteous with broad black borders which are of equal breadth from the tip of the fore border to the tip of the inner border. Length of the body 4 lines; of the wings 11 lines.

a. Mexico. From M. Hartweg's collection.

3. VIRBIA NOTATA.

Nigro-fusca ; pectus albidum; tarsi intermedii albi ; alæ anticæ basi biguttatæ, gutta 1a rufa, 2a flava ; posticæ aurato-flavæ, nigro marginatæ.

Blackish brown with a slight bronze tinge. Palpi and antennæ black. Proboscis testaceous. Pectus whitish. Middle tarsi white. Fore wings with a dull red spot at the base occupying half the breadth from the hind border and adjoining a yellow spot which is shorter but of equal breadth. Hind wings gilded yellow with broad blackish brown borders which are widest at the tips and taper towards the inner margin where they disappear. Length of the body 4½ lines; of the wings 11 lines.

a. Brazil. From M. Becker's collection.

4. VIRBIA SUBMACULA.

Nigro-fusca ; antennæ nigræ, nitentes ; abdomen et pedes subtus albida ; alæ anticæ sublus fascia obliqua subarcuata abbreviata albida ; posticæ albidæ margine lato nigro-fusco.

Blackish brown. Antennæ black, shining. Abdomen and legs whitish beneath. Fore wings beneath with an oblique slightly curved whitish band which does not extend to the borders. Hind wings whitish with a very broad blackish brown border which is narrower and more clearly defined beneath than above. Length of the body 4 lines; of the wings 11 lines.

a. ——— ? From M. Becker's collection.

Genus 76. SPIRIS.

Corpus gracile. Palpi capite breviores, supra recurvi, subsquamosi; articulus 1us incurvus, 2o duplo longior; 2us et 3us æquales, graciliores; 3us ovato-conicus. Proboscis capite vix longior. Antennæ *maris* pectinatæ, *fœminæ* simplices. Alæ anticæ oblongæ subelliptico-truncatæ. Pedes mediocres; tibiæ posteriores quadricalcaratæ. Larvæ graminivoræ, subdiales, obscuræ, vittis dilutioribus aut coloratis. Pupa contracta, *fœminæ* ventricosa.

Spiris et Coscinia, *Hübn. Verz. Schmett.* 169.
Eulepia, *Steph. Ill. Brit. Ent. Haust.* ii. 91.

Eulepia, p., *Curt. Brit. Ent.* iv. 169.
Phalæna Bombyx, p., *Linn.; Stew.; Turt.; Don.*
Arctia, p., *Schr.*
Lithosia, p., *Latr.*
Bombyx, p., *Fabr.; Hübn.; Borkh.; Oliv.; Haw.*
Eyprepia, p., *Ochs.*
Callopis, *Bilberg, Cat.*
Emydia, *Boisd. Ind. Méth. Eur. Lép.* 56; *Meigen; Herr-Schæff.*

1. Spiris grammica.

Alæ luteæ; anticæ nigro striatæ; posticæ fascia terminali lunulaque nigris.

Bombyx grammica, *Linn. Syst. Nat.* ii. 831, 25; *Faun. Suec.* 1134; *Amœn. Acad.* v. pl. 3, f. 31; *Act. Holm.* 1742, 40, pl. 2. *Fabr. Sp. Ins.* ii. 196, 113; *Mant. Ins.* ii. 127, 161. *Wien. Schmetterl.* 54, 12. *Ray, Ins.* 169, 28; 280, 13. *Merian, Ins. Eur.* i. pl. 5. *Roes. Ins.* iv. pl. 21, f. A, D. *Geoffr. Ins. Par.* ii. 115, 17. *Schæff. Icon.* pl. 92, f. 2. *Nomencl. Panz.* 104. *Frisch. Ins.* 10, pl. 21. *Gmel. ed. Syst. Nat.* i. 5, 2436, 75. *Harr. Aur.* pl. 5, f. 7. *Stew. Elem.* ii. 156. *Turt. Syst. Nat.* iii. 220. *Don. Nat. Hist. Brit. Ins.* xiii. 37, pl. 450. *Esp. Schmett.* iii. 350, pl. 68, f. 5—8; 21, pl. 83. *Cont.* 4, f. 3. *Pap. d'Eur.* iv, 155, pl. 156, f. 202. *Schr. Faun. Boic.* ii. 1, 262, 1440. *Fuessl. Schweiz. Ins.* 36, 683; *Mag.* iii. 2, 148, 55; 157, 344. *Vieweg. Tab. Verz.* i, 59, 59. *Lang. Verz.* ii. 93, 721, 722. *Schwarz, Raup.* 86, 238, 649, 754. *Borkh. Eur. Schmett.* iii. 10, 64; *Rhein. Mag.* i. 341, 170. *Brahm, Ins. Kal.* 433, 303. *Hufnagel, Berl. Mag.* ii. 4, 418, 34. *Naturf.* viii. 106, 34. *Rossi, Faun. Etr.* ii. 175, 1096; *ed. Illig.* 280, 1096; *Mantiss.* ii. 141. *Hübn. Bomb.* 132, 4, pl. 28, f. 122, 123; pl. 56, f. 241, 242. *Illig. N. Ausg. dess.* i. 88, 12. *Haw. Lep. Brit.*

Phalæna striata, *Linn. Syst. Nat. ed.* 10, 502, 31. *Oliv. Enc. Méth.* v. 87, 215.

Bombyx striata, *Schwarz, Beitr.* 73, pl. 11, f. 1—4. *Scriba, Beitr.* iii. 214, pl. 17, f. 8, 9. *Borkh. Eur. Schmett.* iii. 471, 64, 65.

Arctia grammica, *Schr. Faun. Boic.* ii. 153, 12.

Bombyx melanoptera, *Brahm*, 134; *Ins. Kal.* ii. 435, 304.

Eyprepia grammica, *Ochs. Schmett.* iii. 306, 5; iv. 60, 5.

Lithosia grammica, *God. Pap. de France*, v. 19, pl. 42, f. 1, 2.

Spiris grammica, *Hübn. Verz. Schmett.* 169, 1743.

Eulepia grammica, *Curt. Brit. Ent.* ii. 56. *Steph. Ill. Brit. Ent. Haust.* ii. 91, 1, pl. 17, f. 3. *Westw. and Humph. Brit. Moths*, i. 100, pl. 20, f. 34.

Emydia grammica, *Boisd. Ind. Meth. Eur. Lep.* 57, 465. *Meig. Handb.* 139, 88; *Syst. Beschr. Eur. Schmett.* iii. 45, 1, pl. 87, f. 9. *Eversm. Faun. Lep. Volgo-Ural.* 160, 3. *Herr-Schæff. Samml. Eur. Schmett.* ii. 150, 37.

Euprepia grammica, *Boie, Verz. Dan. Schmett. Kroyer, Nat. Tidsk.* 1841. *Isis*, 1841, 173, 1. *A. et O. Speyer, Isis*, 1843.

a. England. From Mr. Stephens' collection.
b. England.
c—h. Europe. From M. Becker's collection.

2. Spiris Rippertii.

Obscure cinerea; alæ anticæ fasciis tribus guttularibus nigris; posticæ nigricantes fimbria cinerea.

Emydia Rippertii, *Boisd. Icon.* pl. 57, 4, *Suppl.* 47; *Ind. Meth. Eur. Lep.* 57, 464. *Duponch. Herr-Schæff. Samml. Eur. Schmett. Text*, ii. 149, 38.

Pyrenees.

3. Spiris cribrum.

Alæ anticæ cærulescente-albæ, transverse nigro punctatæ; posticæ cinereæ.

Var. *Alæ anticæ punctis duobus nigris.*

Eulepia cribrum, *Curt. Brit. Ent.* ii. pl. 56.

Bombyx cribrum, *Linn. Syst. Nat.* ii. 831, 76; *Faun. Suec.* ii. 1136, 1761. *Gmel. ed. Syst. Nat.* i. 5, 2441, 76. *Wien. Verz.* 68, 8. *Fabr. Ent. Syst.* iii. i. 487, 248. *Naturf.* ii. 17, pl. 1, f. 3. *Esp. Schmett.* iii. 353, pl. 69, f. 1. *Borkh. Schmett.* iii. 213, 65; *Rhein. Mag.* i. 341, 180. *Illig. N. Ausg. Wien. Verz.* i. 178, 8. *Pap. d'Eur.* vi. 47, pl. 220, f. 308. *Oliv. Enc. Méth.* v. 103, 271. *Hübn. Beitr.* i. pl. 4, f. W; *Bomb.* 137, 3, pl 28, f. 120, 121.

Coscinia cribrum, *Hübn. Verz. Schmett.* 169, 1742.

Eulepia cribrum, *Steph. Ill. Brit. Ent. Haust.* ii. 92, 2.

Euprepia cribrum, *Ochs. Schmett.* iii. 302, 3; iv. 39, 4.

Lithosia cribrum, *God. Pap. de France*, v. 26, pl. 43, f. 1, 2.

Emydia cribrum, *Boisd. Ind. Meth. Eur. Lep.* 57, 462. *Meig. Handb.* 138, 86, pl. 10, f. 6; *Syst. Besch. Eur. Schmett.* iii. 46, 2, pl. 87, f. 10. *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 150, 39.

a—d. England. From Mr. Stephens' collection.
e. England.
f—k. Europe. From M. Becker's collection.

Var. Bombyx cribellum, *Esp. Schmett.* iii. pl, 87, f. 2, 3.
Bombyx Colon, *Rossi, Faun. Etr.* ii. 177, 1101; *ed. Illig.* 282, 1101. *Hübn. Samml. Schmett.* pl. 37; *Bomb.* 131, 2, pl. 38, f. 19! *Frey.*
Bombyx candida, *Cyrilli, Ent. Neapol. Spec.* i. 5, pl. 6, f. 5. *Hübn. Bomb.* 19.
Coscinia Cyrilli, *Hübn. Verz. Schmett.* 169, 1741.
Eyprepia candida, *Ochs. Schmett.* iii. 301, 2; iv. 59, 2.
Lithosia candida, *God. Pap. de France*, v. 28, pl. 43, f. 3, 4. *Boisd.*
Lithosia cribilla, *God. Pap. de France*, v. 29, pl. 43, f. 5.
Bombyx? punctigera? *Freyer.*
Emydia candida, *Meigen. Syst. Besch. Eur. Schmett.* iii. 46, 3, pl. 87, f. 13.
Emydia bifasciata, *Ramb.*

Corsica.

a, *b*. Gibraltar. From Mr. Milne's collection.
c. Turkey. Presented by — Loftus, Esq.

4. Spiris coscinia.

Caput et abdomen apice fulva; alæ anticæ cærulescente-albæ punctis duobus fuscis; posticæ cinereæ.

Bombyx albeola? *Hübn. Bomb.* 337, *Suppl.* 75, 78.
Bombyx chrysocephala, *Hübn. Bomb.* pl. 58, f. 251.
Eyprepia coscinia, *Ochs. Schmett.* iii. 300, 1; iv. 59, 1.
Coscinia chrysocephala, *Hübn. Verz. Schmett.* 169, 1740.
Emydia chrysocephala, *Meig. Syst. Besch. Eur. Schmett.* iii. 46, 4.
Emydia coscinia, *Boisd. Icon.* pl. 57, f. 2. *Herr-Schæff. Samml. Eur. Schmett. Text*, ii. 150, 40.

South Europe.

Var. Bombyx bipuncta, *Hübn. Bomb.*

Dalmatia.

Genus 77. MELASINA.

Corpus robustum. Antennæ sat elongatæ, *maris* pectinatæ, *fœminæ* ciliatæ. Palpi brevissimi, valde pilosi. Proboscis spuria, vix ulla. Abdomen alas posticas superans. Alæ angustæ, immaculatæ.

Eyprepia, p., *Ochs.*
Melasina, *Boisd. Ind. Meth. Eur. Lep.* 57.

1. MELASINA CILIARIS.

Atra ; alæ ciliis anticæque margine costali albis.

Eyprepia lugubris, *Hübn.*
Eyprepia ciliaris, *Ochs. Schmett.*
Melasina ciliaris, *Boisd. Ind. Meth. Eur. Lep.* 57.
South Europe.

Genus 78. ORICIA.

Corpus gracile, lineare, cylindricum, longiusculum. Palpi graciles, ascendentes, subarcuati, capite non breviores; articulus 3us minimus. Antennæ *maris* subpectinatæ aut setosæ, *fœminæ* subsetosæ. Abdomen alas posticas paullo superans. Pedes gracillimi; tibiæ posticæ calcaribus quatuor mediocribus. Alæ longiusculæ, sat angustæ.

A genus which seems to connect *Eulepia* with *Lithosia*. Body slender, linear, cylindrical, rather long. Palpi slender, ascending, slightly curved, full as long as the head; third joint very minute, less than one-tenth of the length of the second. Antennæ of the male minutely pectinated or beset with short bristles, of the female very minutely setose. Abdomen extending for about one-third of its length beyond the hind wings, rather longer in the male than in the female. Legs very slender; hind tibiæ with four spurs of moderate length. Wings rather long and narrow.

1 ORICIA TRUNCATA.

Flava ; antennæ nigræ ; abdomen apicem versus nigro bivittatum ; alæ anticæ cinereæ, costa nigra, vitta antica lata abbreviata marginata apice oblique truncata flava ; posticæ nigro marginatæ.

Yellow. Antennæ black. Hind part of the abdomen with two black stripes which are united at the tip. Tibiæ and tarsi brown; hind tibiæ yellow towards the base. Fore wings gray with a yellow stripe which extends from the base to two-thirds of the length and more than half the breadth from the front, is bordered with dark gray, and is obliquely truncated at the tip; on the under side it occupies the whole breadth of the wing and extends a little nearer

to the tip; costa black. Hind wings with black borders. Length of the body 4½—5½ lines; of the wings 13—15 line

a,*b*. Honduras. From Mr. Dyson's collection.
c. Honduras. From Mr. Miller's collection.
d. Guatimala. From Mr. Stevens' collection.

Genus 79. LERINA.

Mas. Corpus breve, crassum, valde pilosum. Palpi crassi, brevissimi, pilosi; articulus 3us minimus. Proboscis brevissima. Antennæ sat late pectinatæ. Abdomen alarum margines posticos attingens. Pedes mediocriter validi; tibiæ posticæ calcaribus mediis sat longis, apicalibus minutis. Alæ angustæ, longiusculæ; anticæ costa non arcuata, postice subcurvatæ non angulatæ, venis 1a et 2a inferioribus basi fere contiguis, 4a remota.

Male. Body short, thick, very hairy. Palpi thick, very short, hairy; third joint very small. Proboscis very short. Antennæ rather deeply pectinated. Abdomen extending as far as the hind wings. Legs moderately stout; hind tibiæ with two rather long middle spurs and two minute apical spurs. Wings narrow, rather long. Fore wings straight in front, slightly rounded and not angular behind; first and second inferior veins almost contiguous at the base; third about six times nearer to the second than to the fourth.

1. LERINA INCARNATA.

Nigra, nigro-hirta; caput supra, thorax et abdomen apicem versus coccineo-hirta; alæ cyaneo-virides.

Black, clothed with black hairs. Head above, thorax, and abdomen towards the tip thickly clothed with crimson hairs. Palpi, proboscis, antennæ and legs black. Thorax with a black dorsal stripe, not extending to the front. Wings metallic bluish green, not hairy. Length of the body 5½ lines; of the wings 16 lines.

a. Mexico. Presented by E. Doubleday, Esq.

Genus 80. APISTOSIA.

Mas. Corpus sublineare, sat robustum, mediocriter longum. Palpi crassi, capite valde breviores; articulus 3us conicus, minimus. Proboscis sat longa. Antennæ mediocriter pectinatæ. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calca-

ribus quatuor longis. Alæ mediocriter amplæ; anticæ ad costam vix convexæ, postice subangulatæ, venis 1a et 2a inferioribus basi conjunctis.

Apistosia, p., *Hübn. Verz. Schmett.* 163.
Bombyx, p., *Fabr.; Gmel.; Oliv.*

Male. Body nearly linear, rather stout, moderately long. Palpi stout, very much shorter than the head; third joint conical, very small. Proboscis of moderate length. Antennæ moderately pectinated. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately long and broad. Fore wings very slightly convex in front, obtusely angular behind; first and second inferior veins united at the base; third rather more than four times nearer to the second than to the fourth.

1. Apistosia Judas.

Nigro-viridis; caput et thorax luteo-hirta; alæ albo ciliatæ, posticæ fusco-nigræ.

Apistosia Judas, *Hübn. Samml. Exot. Schmett.* 13, 26, f. 51, 52; *Verz. Schmett.* 163, 1693.

a. Honduras. From Mr. Dyson's collection.

2. Apistosia? terminalis.

Cyaneo-purpurea; caput, thorax anticus, abdomen apice et coxæ anticæ coccinea; pedes purpureo-nigri; alæ nigræ, viridi et purpureo variæ.

Body linear, bluish purple. Head, fore part of the thorax, tip of the abdomen and fore coxæ crimson. Palpi shorter than the head; third joint conical, less than one-fourth of the length of the second. Antennæ wanting. Abdomen extending for one-third of its length beyond the hind wings. Legs purplish black, moderately stout. Wings black, tinged with green and purple, rather long and narrow; first and second inferior veins of the fore wings near together at the base; third full twice further from the fourth than from the second. Length of the body 6 lines; of the wings 19 lines.

a. Mexico. Presented by E. Doubleday, Esq.

The characters of this and of the following species, of which the specimens described are deprived of their antennæ, partly differ from those of *Apistosia.*

3. Apistosia? multifaria.

Cyanea; caput, prothorax et thoracis latera rosea; alæ nigræ, basi cyanescentes, costa fimbriaque albis.

Allied to *Euchromia?* Metallic blue. Head, prothorax and sides of the thorax clothed with rosy hairs. Abdomen extending very little beyond the hind wings. Fore coxæ, knees and tips of the tibiæ white. Palpi red, very much shorter than the head; third joint conical, very small. Wings black, rather long and narrow, tinged with blue towards the base; costa and fringe mostly white; first and second inferior veins very near together at the base; third full four times further from the fourth than from the second. Length of the body 7 lines; of the wings 20 lines.

a. California. From M. Deyrolle's collection.

4. Apistosia? Umber.

Fusca; caput inter oculos flavo guttatum; antennæ subpectinatæ; pectus guttis duabus anticis lateralibus flavidis; abdomen flavum, vitta basali nigra.

Phalæna Umber, *Cram. Pap. Exot.* i. 24, pl. 15, f. F.
Bombyx Umber, *Fabr. Sp. Ins.* ii. 202, 138; *Mant. Ins.* ii. 131, 193; *Ent. Syst.* iii. 1, 478, 220. *Gmel. ed. Syst. Nat.* i. 5, 2447, 599. *Oliv. Enc. Méth.* v. 99, 253.
Apistosia Umber, *Hübn. Verz. Schmett.* 164, 1694.
Surinam.

Genus 81. ANTONA.

Mas. Corpus sublineare, sat validum, mediocriter longum. Caput parvum. Palpi porrecti, graciles, capite paullo breviores; articulus 3us acuminatus, 2i dimidio longior. Proboscis mediocriter longa. Antennæ subpectinatæ. Abdomen alas posticas non superans. Pedes validiusculi; tibiæ posticæ calcaribus quatuor mediocribus. Alæ sat angustæ, mediocriter longæ; anticæ costa vix convexa, postice vix angulatæ, venis 1a et 2a inferioribus basi approximatis, 4a valde arcuata.

Male. Body nearly linear, rather stout, moderately long. Head small. Palpi straight, porrect, slender, a little shorter than the head; third joint acuminated, more than half the length of the

second. Proboscis moderately long. Antennæ minutely pectinated. Abdomen not extending beyond the hind wings. Legs rather stout; hind tibiæ with four spurs of moderate length. Wings rather narrow, of moderate length. Fore wings very slightly convex in front, hardly angular behind; first and second inferior veins near together at the base; third a little nearer to the fourth than to the second; fourth much curved near the base.

1. ANTONA SUBLUNA.

Cyaneo-nigra; abdomen apice subtus rubrum; alæ anticæ basi rubræ; posticæ macula magna discali limpida.

Bluish black. A tuft, sometimes indistinct, of red hairs on each side of the thorax and by the base of the fore wings. Abdomen red at the tip beneath. Hind wings with a white hyaline nearly round discal spot, which as usual is larger beneath and forms a stripe widening from the base to beyond the middle. Length of the body 5—6 lines; of the wings 16—20 lines.

a. Brazil. From Mr. Stevens' collection.
b. Rio Janeiro. From Mr. Johnson's collection.
c, *d*. Brazil. From Mr. Argent's collection.

Genus 82. ITUNA.

Mas. Corpus robustum, breve. Caput parvum. Palpi sat validi, capite breviores; articulus 3us conicus, 2o duplo brevior. Antennæ setacæ, crassiusculæ, subcompressæ, subsetosæ. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor mediocribus. Alæ sat angustæ, non longæ; anticæ ad costam subconvexæ, postice rotundatæ non angulatæ, venis inferioribus 1a 2a et 3a basi approximatis, 4a valde remota.

Male. Body stout, short. Head small. Palpi rather stout, shorter than the head; third joint conical, about half the length of the second. Antennæ setaceous, rather stout, slightly compressed, very minutely setose. Abdomen not extending beyond the hind wings. Legs rather stout; hind tibiæ with four spurs of moderate length. Wings rather narrow, not long. Fore wings slightly convex in front, rounded and not angular behind; first second and third inferior veins close together at the base; fourth parted from them by rather more than the length of each of them.

1. Ituna cingulata.

Nigra ; thoracis latera et alæ basi roseæ.

Black. Sides of the thorax and wings at the base rosy above and beneath. Length of the body 5 lines; of the wings 14 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 83. BALBURA.

Corpus breve, sat validum. Caput mediocre. Palpi arcuati, ascendentes, capite vix breviores; articulus 3us acuminatus, 2i dimidio æqualis. Antennæ *maris* subpectinatæ, *fœminæ* serratæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ subangustæ, non longæ; anticæ ad costam vix convexæ, postice subangulatæ, venis 1a et 2a inferioribus basi fere contiguis.

Male and Female. Body short, rather stout. Head of moderate size. Palpi curved, ascending, nearly as long as the head; third joint acuminated, about half the length of the second. Antennæ of the male minutely pectinated, of the female serrated. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather narrow, not long. Fore wings very slightly convex in front, slightly angular behind; first and second inferior veins almost contiguous at the base; third full thrice nearer to the second than to the fourth.

1. Balbura dorsisigna.

Nigro-cinerea ; thorax luteo-roseus ; alæ anticæ macula luteo-rosea basali.

Gray. Thorax rosy luteous. Wings with black veins; fore wings with a rosy luteous spot at the base. Length of the body 3½ lines; of the wings 10—11 lines.

Var. β. Prothorax black.

Var. γ. Vertex with a rosy luteous spot.

a—d. Venezuela. From Mr. Dyson's collection.
e. Honduras. From Mr. Dyson's collection.

Genus 84. ARDONEA.

Mas. Corpus sat gracile, sublineare, mediocriter longum. Palpi pilosi, capite multo breviores; articulus 3us conicus, 2o quadruplo brevior. Antennæ mediocriter pectinatæ. Abdomen longi fusiforme, alas posticas quadrario superans, apice forcipatum. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, subangustæ; anticæ ad costam vix convexæ, postice subangulatæ, venis 1a et 2a inferioribus basi conjunctis, 3a 4aque haud remotis.

Male. Body rather slender, nearly linear, moderately long. Palpi hairy, much shorter than the head; third joint conical, not more than one-fourth of the length of the second. Antennæ moderately pectinated. Abdomen elongate-fusiform, extending for one-fourth of its length beyond the hind wings, forcipated at the tip. Legs rather slender; hind tibiæ with four long spurs. Wings rather long and narrow. Fore wings hardly convex in front, slightly angular behind; first and second inferior veins united at the base; third very near the second; fourth twice further from the third than the third from the second.

1. Ardonea Morio.

Nigro-viridis; alæ posticæ nigro-cyaneæ.

Lithosia Morio, *MSS.*

Greenish black. Hind wings bluish black. Length of the body 4—5 lines; of the wings 12—14 lines.

Var. β. Fore wings blackish blue.

Var. γ. Hind wings greenish black towards the hind border.

a. ——— ? From M. Becker's collection.
b. Venezuela. From Mr. Dyson's collection.
c. ——— ? Presented by E. Doubleday, Esq.
d. ——— ? From Mr. Children's collection.

Genus 85. ATOLMIS.

Palpi mediocres, supra recurvi, subsquamosi; arculi 1us et 2us longitudine subæquales; 1us validus; 2us sublinearis; 3us minutus, subovatus. Maxillæ antennis longitudine æquales. Antennæ simplices, *maris* setosæ. Alæ anticæ oblongæ, subelliptico-truncatæ;

posticæ opacæ. Pedes breves, sat validi; tibiæ breves, robustæ, posteriores quadricalcaratæ.

Noctua, p., *Linn.*; *Fabr.*; *Schr.*; *Donov.*
Bombyx. p., *Fabr.*; *Hübn.*; *Panz.*
Setina, p., *Schr.*
Lithosia, p., *Fabr.*; *Haw.*; *Ochs.*; *God.*; *Meig.*
Atolmis, *Hübn.*; *Westw.*; *Steph.*
Gnophria, *Steph.*

1. Atolmis rubricollis.

Nigra; prothorax rufus; abdomen apicem versus subtusque luteum.

Noctua rubricollis, *Linn. Syst. Nat.* i. 2, 840, 113; *Faun. Suec. ed.* 2, 307, 1154. *Fabr. Sp. Ins.* ii. 206, 153; *Mant. Ins.* ii. 133, 214. *Wien. Verz.* 68, 11. *Illig. N. Ausg. dess.* i. 180, 11. *Geoffr. Hist. Ins.* ii. 148, 79, pl. 12, f. 6. *Clerck, Icon.* pl. 2, f. 3. *Esp. Schmett.* iv. 90, pl. 92, f. 1; *Pap. d'Eur.* vi. 52, pl. 222, f. 311. *Müller, Faun. Fridr.* 42, 379; *Zool. Dan.* 120, 1388. *Fuessl. Schweiz. Ins.* 37, 704; *Mag.* ii. 60, 113. *Hufnagel, Tab. in Berl. Mag.* iii. 2, 208, 8. *Schr. Faun. Boic.* ii. 1, 315, 1513. *Lang. Verz.* ii. 165, 1163, 1164. *Schwarz, Raup.* 276. *Turt. Syst. Nat.* iii. 230. *Don. Nat Hist. Brit. Ins.* x. 68, pl. 350, f. 3.

Bombyx rubricollis, *Gmel. ed. Syst. Nat.* i. 5, 2446, 113. *Fabr. Ent. Syst.* iii. 1, 486, 245. *Stew. Elem.* ii. 159. *Borkh. Eur. Schmett.* iii. 260, 90. *Rhein. Mag.* i. 348, 149. *Schæff. Icon.* pl. 59, f. 8, 9. *Oliv. Enc. Meth.* v. 102, 269. *Nomencl. Panz.* 77. *Panz. Faun. Germ.* 9, 18. *Vieweg, Tab. Verz.* i. 63, 68. *Hübn. Bomb.* 125, 5, pl. 23, f. 94; *Larv. Lep.* iii. *Bomb.* 2. *Veræ*, F. *c—f. b—d.*

Setina rubricollis, *Schr. Faun. Boic.* ii. 167, 15.

Lithosia rubricollis, *Haw. Lep. Brit.* 14, 9. *Ochs. Schmett.* iii. 142, 10; iv. 52, 11. *God. Pap. de France*, v. 22, pl. 42, f. 3. *Meig. Handb.* 118, 35; *Syst. Beschr. Eur. Schmett.* iii. 48, 3, pl. 87, f. 11. *Zeller, Isis*, 1840, 210, 61. *A. et O. Speyer, Isis*, 1843, 189, 1846. *Lep. Beytr.* 29.

Atolmis rubricollis, *Hübn. Verz. Schmett.* 164, 1698. *Westw. and Humph. Brit. Moths*, i. 103, pl. 20, f. 20, 21.

Gnophria rubricollis, *Steph. Ill. Brit. Ent. Haust.* ii. 98, 1.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g—j. Europe. From M. Becker's collection.

2. ATOLMIS FLAVICAPILLA.

Pallide fusca; caput luteum; abdomen et alæ posticæ cinereæ.

Atolmis flavicapilla, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Bomb.* ii. *Veræ*, vi. *Lithosiæ*, *A. Tineiformes*, b, f. 1—4; *Verz. Schmett.* 164, 1699.

Genus 86. ASURA.

Mas. Corpus gracile, lineare, non longum. Palpi capite valde breviores; articulus 3us conicus, 2o quadruplo brevior. Antennæ mediocriter pectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ anticæ subtus dentatæ, posticæ calcaribus duobus parvis apicalibus. Alæ sat longæ, mediocriter latæ. Alæ anticæ ad costam non arcuatæ, postice rotundatæ non angulatæ.

Male. Body slender, linear, not long. Palpi very much shorter than the head; third joint conical, about one-fourth of the length of the second. Antennæ moderately pectinated. Abdomen not extending beyond the hind wings. Legs slender; fore tibiæ armed with a long tooth; hind tibiæ with two small apical spurs. Wings rather long, moderately broad. Fore wings straight in front, rounded and not angular behind; first and second inferior veins near together at the base; second much further from the third than from the first; fourth about thrice further from the third than the third from the second.

1. ASURA CERVICALIS.

Nigra; caput antice luteum; prothorax luteus; abdomen luteo trivittatum; alæ anticæ luteo sexmaculatæ; posticæ luteæ nigro latissime marginatæ.

Black. Head luteous in front. Proboscis testaceous. Prothorax clothed with luteous hairs. Abdomen with three luteous stripes. Fore wings with six sometimes subdivided luteous spots which form three interrupted and abbreviated oblique bands in the disk. Hind wings luteous, black towards the base and with black borders which are broadest at the tips. Length of the body 4—4½ lines; of the wings 13—14 lines.

a—c. New Holland. Presented by Major-General Hardwicke.
d. Van Dieman's Land. Presented by J. G. Children, Esq.

2. Asura gaudens.

Atra; prothorax, caput, et abdomen subtus apiceque lutea; alæ anticæ maculis septem et fascia luteis; alæ posticæ luteæ fascia discali apiceque late nigris.

Black. Head luteous. Palpi and proboscis testaceous. Abdomen luteous at the tip and beneath except a black band near the tip. Antennæ black. Prothorax luteous. Fore wings with four luteous spots, beyond which there is a curved band, and nearer the tip three more spots. Hind wings luteous with a black band, and with a broad black band which occupies at the tips more than one-third of the length. Length of the body 3—3½ lines; of the wings 9—10 lines.

a, b. ———?

Genus 87. LACTURA.

Fœm. Corpus sublineare, breviusculum, mediocriter validum. Proboscis sat longa. Palpi robusti, capite multo breviores; articulus 3us conicus, 2o quadruplo brevior. Antennæ validæ, subserratæ, corpore vix breviores. Abdomen alas posticas triente superans. Pedes subvalidi; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ, non longæ; anticæ ad costam vix convexæ, postice subangulatæ.

Female. Body nearly linear, rather short, moderately stout; Proboscis rather long. Palpi stout, much shorter than the head; third joint conical, not more than one-fourth of the length of the second. Antennæ stout, very minutely serrated, almost as long as the body. Abdomen extending for one-third of its length beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings narrow, not long. Fore wings hardly convex in front, slightly angular behind; inferior veins near together at the base; third twice further from the second than the second from the first; fourth about twice further from the third than the third from the second.

1. Lactura dives.

Cupreo-fusca; caput luteum; palpi, antennæ et pedes nigra; thorax flavo biguttatus; abdomen luteo bivittatum; pedes nigri; alæ anticæ flavo septemmaculatæ; posticæ basi luteæ.

Cupreous brown. Head luteous, yellow in front and beneath. Palpi and antennæ black. Proboscis testaceous. Thorax in front

and pectus with luteous hairs, a yellow dot on each shoulder. Abdomen with a luteous stripe on each side. Legs black. Fore wings with seven yellow spots, one by the base, two before the middle, three beyond the middle, and one near the tip. Hind wings luteous towards the base. Length of the body 4½ lines; of the wings 12 lines.

a. New Holland. From Mr. Gould's collection.

Genus 88. CEBYSA.

Mas. Corpus lineare, mediocriter longum et robustum. Caput parvum. Palpi pilosi, capite multo breviores; articulus 3us acuminatus, minimus. Antennæ filiformes, subpilosæ, sat validæ. Abdomen alas posticas superans. Pedes robusti; tibiæ posticæ dilatatæ, calcaribus quatuor longiusculis.

Male. Body linear, moderately long and stout. Head small. Palpi hairy, much shorter than the head; third joint acuminated, very small. Antennæ filiform, minutely pilose, rather stout. Abdomen extending beyond the hind wings. Legs stout; hind tibiæ dilated, with four rather long spurs. Wings imperfectly developed in the specimen described.

1. CEBYSA LEUCOTELUS.

Cyaneo-viridis, metallicolor; palpi et tarsi nigri; antennæ apice albæ; abdomen apice dense hirtum; alæ apice luteæ, anticæ luteo trimaculatæ.

Metallic bluish green. Palpi, proboscis and tarsi black. Antennæ with white tips. Abdomen thickly setose at the tip. Wings with luteous tips. Fore wings with two luteous dots and an intermediate luteous spot on the fore border. Length of the body 4 lines; of the wings 6 or more? lines.

a. Sydney. From the collection of the Paris Museum.

Genus 89. HYPOPREPIA.

Fœm. Corpus robustum, breviusculum, subfusiforme. Caput parvum. Palpi validi, capite valde breviores; articulus 3us acuminatus, 2i dimidio brevior. Proboscis brevis. Antennæ subpilosæ, corporis dimidio non longiores. Abdomen oblanceolatum, alarum margines posticos vix attingens. Pedes subvalidi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ mediocriter latæ, non longæ; anticæ ad costam subconvexæ, postice rotundato-angulatæ.

Hypoprepia, *Hübn. Samml. Exot. Schmett.*

Female. Body stout, rather short, elongate-subfusiform. Head rather small. Palpi stout, very much shorter than the head; third joint acuminated, not half the length of the second. Proboscis short. Antennæ minutely pilose, not more than half the length of the body. Abdomen oblanceolate, not extending quite so far as the hind wings. Legs moderately stout; hind tibiæ with two minute apical spurs. Wings moderately broad, not long. Fore wings slightly convex in front; the hind angle somewhat rounded; first and second inferior veins almost contiguous at the base; third about eight times nearer to the second than to the fourth.

1. HYPOPREPIA FUCOSA.

Rosea; abdomen fascia lata dorsali cinerea; alæ cinereæ; anticæ marginibus vittaque furcata roseis; posticæ dimidio basali roseo.

Hypoprepia fucosa, *Hübn. Samml. Exot. Schmett.* 21, 236, f. 471, 472.

a, *b*. Georgia. Presented by E. Doubleday, Esq.
c. ——— ?

2. HYPOPREPIA ADMIRABILIS.

Rosea, albo maculata; alæ anticæ flavæ, margine antico fasciaque obliqua discali ocellis nigris guttata albis, guttaque nigra albo cincta; posticæ albæ.

Phalæna admirabilis, *Cram. Pap. Exot.* ii. 11, pl. 103, f. G.

Surinam.

3. HYPOPREPIA? DELINEATA.

Rufa; abdomen subtus nigricans; alæ anticæ strigis guttisque basalibus marginibusque fasciisque tribus nigris, fascia 1a recta, 2a arcuata, 3a strigosa; posticæ marginibus latissimis apicalibus nigris.

Red. Proboscis tawny. Antennæ brown, red towards the base. Abdomen mostly black beneath. Knees and tips of the tibiæ black. Fore wings with a narrow black border, with some black streaks and dots near the base, with an oblique straight black band beyond the middle, and joining at each end another black band which is much curved; between the two there is a black dot, and the last-mentioned band emits black streaks of various length towards the tip of the wing. Hind wings with a black dot in front beyond the middle,

and with very broad black apical borders. Length of the body 4½ lines; of the wings 14 lines.

a. Shanghai, N. China. From Mr. Fortune's collection.

Genus 90. DIANASA.

Fœm. Corpus robustum, breviusculum, longi-subfusiforme. Caput parvum. Palpi capite valde breviores; articulus 3us acuminatus, 2i dimidio brevior. Proboscis sat longa. Antennæ subserratæ, corpore paullo breviores. Abdomen longi-ovatum, alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor minutis. Alæ longiusculæ, subangustæ; anticæ subfusiformes, ad costam subconvexæ, postice rotundatæ non angulatæ.

Female. Body stout, rather short, elongate-subfusiform. Head small. Palpi very much shorter than the head; third joint acuminated, not half the length of the second. Proboscis rather long. Antennæ very minutely serrated, a little shorter than the body. Abdomen elongate-oval, extending for about one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four minute spurs. Wings rather long and narrow. Fore wings subfusiform, slightly convex in front, rounded and not angular behind.

1. Dianasa suffusa.

Rufa; caput, thorax anticus et abdominis vitta ventralis alba; alæ anticæ testaceæ, costa basali apiceque albis, rufo submarginatæ et quinqueguttatæ; posticæ albo ciliatæ.

Pale red. Head, fore part of the thorax, and a stripe beneath the abdomen white. Antennæ and tips of the palpi black. Fore wings testaceous, white along the basal third of the costa, and both in front and behind towards their tips, and with five red dots, three in front, and two behind; testaceous part bordered with red. Hind wings fringed with white and with white tips beneath. Legs black; femora red, with black tips. Length of the body 5—6 lines; of the wings 16—18 lines.

a, *b*. Australia. From Mr. Argent's collection.

Genus 91. CISSURA.

Fœm. Corpus validum, breviusculum, longi-subfusiforme. Caput mediocre. Palpi longi, arcuati, ascendentes, capite vix breviores; articulus 3us minimus. Antennæ gracillimæ, subsetosæ,

corpore paullo breviores. Abdomen oblanceolatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor parvis. Alæ longiusculæ, subangustæ; anticæ subfusiformes, ad costam vix convexæ, postice vix angulatæ; venis 1a et 2a inferioribus basi petiolum fingentibus.

Female. Body stout, rather short, elongate-subfusiform. Head of moderate size. Palpi long, curved, ascending, nearly as long as the head; third joint very minute, not one-sixth of the length of the second. Antennæ very slender, beset with minute bristles, about three-fourths of the length of the body. Abdomen oblanceolate, extending for full one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four small spurs. Wings rather long and narrow. Fore wings subfusiform, very slightly convex in front, very indistinctly angular behind; first and second inferior veins united for some space from the discal areolet; third rather further from the fourth than from the union of the first and the second.

1. CISSURA DECORA.

Coccinea; thorax nigro-cyaneus fascia antica vittisque duabus coccineis; pedes nigri; alæ anticæ nigro-cyaneæ vittis tribus margineque apicali coccineis; posticæ albidæ apice fuscæ.

Crimson. Head, antennæ, proboscis and palpi black, the latter crimson at the base. Thorax blackish blue, with a crimson band in front, and with two crimson dorsal stripes. Pectus thickly clothed with crimson hairs. Legs black; tarsi white at the base. Fore wings bluish black, with three crimson stripes, one near the fore border and on it towards the base, one in the middle, and one on the hind border; borders crimson towards the tips; under side without stripes, having a small patch of white hairs in the disk at the base by which there is a transverse loop-vein. Hind wings whitish, brown towards the tips. Length of the body 7 lines; of the wings 18 lines.

a. Brazil. From Mr. Mornay's collection.

Genus 92. LYMIRE.

Fœm. Corpus robustum, longifusiforme. Caput magnum. Palpi validi, subarcuati, capite paullo breviores; articulus 3us conicus, minimus. Proboscis mediocriter longa. Antennæ setaceæ, mediocriter pectinatæ, corporis dimidio paullo longiores. Abdomen alas posticas dimidio fere superans. Pedes graciles, longiusculi; tibiæ posticæ calcaribus quatuor minutis. Alæ valde angustæ, subacuminatæ.

Female. Body stout, elongate-fusiform. Head large. Palpi stout, slightly curved, a little shorter than the head; third joint conical, very small, not one-fourth of the length of the second. Proboscis of moderate length. Antennæ setaceous, moderately pectinated, rather more than half the length of the body. Abdomen extending for nearly half its length beyond the hind wings. Legs slender, rather long; hind tibiæ with four minute spurs. Wings very narrow, somewhat pointed. Fore wings straight in front for two-thirds of the length, conical towards the tips, very oblique along the apical border, very obtusely angular behind; first and second inferior veins united for a short space from the base; third very near the second; fourth remote from the third.

1. LYMIRE MELANOCEPHALA.

Cana; caput nigrum; prothorax pallide luteus; abdomen nigricans, subtus pallide luteum; pedes anteriores fusci, postici testacei; alæ anticæ costa testacea; posticæ limpidæ apice canæ.

Hoary. Head, antennæ, proboscis and palpi black. Head, palpi and fore coxæ thickly clothed beneath with pale luteous hairs. Prothorax clothed with pale luteous hairs. Abdomen blackish, pale luteous beneath. Anterior legs brown, with testaceous femora; hind legs testaceous. Fore wings with testaceous fore borders. Hind wings limpid, with hoary fore borders and tips. Length of the body 6½ lines; of the wings 17 lines.

a. Jamaica. From Mr. Gosse's collection.

Genus 93. APYRE.

Fœm. Corpus valde crassum, breviusculum. Palpi validi, ascendentes, subarcuati, capite breviores; articulus 3us minimus. Proboscis mediocriter longa. Antennæ graciles, setaceæ, subpubescentes, corporis dimidio paullo longiores. Abdomen basi subangustatum, apice rotundatum, alas posticas triente superans. Pedes graciles, longiusculi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ angustæ, non longæ; anticæ ad costam subconvexæ, apices versus conicæ, apud marginem apicalem perobliquæ postice rotundatæ non angulatæ; venis 1a et 2a basi fere contiguis.

Female. Body very thick, rather short. Palpi stout, ascending, slightly curved, shorter than the head; third joint very minute, not

one-eighth of the length of the second. Proboscis moderately long. Antennæ slender, setaceous, minutely pubescent beneath, rather more than half the length of the body. Abdomen slightly increasing in breadth from the base to the tip which is rounded, extending for about one-third of its length beyond the hind wings. Legs slender, rather long; hind tibiæ with four spurs of moderate length. Wings narrow, not long. Fore wings very slightly convex in front, conical towards the tips, very oblique along the apical border, rounded, and not angular behind; first and second inferior veins almost contiguous at the base; third much further from the fourth than from the second.

1. APYRE SEPARATA.

Cinereo-fusca; caput et palpi lutea, hi macula nigra; thorax cano quinquevittatus, antice luteus; abdomen fascia latissima lutea; pedes albido strigati; alæ anticæ albido venosæ, posticæ luteæ, apice cinereo-fuscæ.

Brownish gray. Head and palpi luteous, the latter with a black spot above. Proboscis tawny. Antennæ brown. Thorax luteous in front, and with five hoary stripes. Abdomen with a very broad luteous band occupying the three middle segments, black from thence to the tip. Legs with whitish streaks; fore coxæ luteous. Fore wings with whitish veins. Hind wings luteous, brownish gray for more than one-third of the length from the tips, and with a brownish gray fore border which is indented at its tip. Length of the body 6 lines; of the wings 15 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

Genus 94. MELESE.

Fœm. Corpus crassum, mediocriter longum. Palpi ascendentes, subarcuati, capite vix breviores; articulus 2us 1o longior; 3us minimus. Proboscis brevis. Antennæ graciles, setaceæ, subsetosæ, corporis dimidio longiores. Abdomen lineare, cylindricum, alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor parvis. Alæ angustæ, non longæ; anticæ ad costam vix convexæ, apices versus subconicæ, apud marginem apicalem obliquæ, angulo postico obtuso, venis 1a 2a et 3a inferioribus basi contiguis, 4a remota.

Female. Body thick, of moderate length. Palpi ascending, hardly curved, nearly as long as the head; second joint longer than the first; third very minute, not more than one-eighth of the length of the second. Proboscis short. Antennæ slender, setaceous, very minutely setose beneath, more than half the length of the body. Abdomen linear, cylindrical, extending for full one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four short spurs. Wings narrow, not long. Fore wings very slightly convex in front, nearly conical towards the tips, oblique along the apical border, obtusely angular behind, first, second and third inferior veins contiguous at the base, fourth remote.

1. MELESE POSTICA.

Cervina; corpus subtus albidum; palpi rosei, extus fusci; abdomen supra roseum; pedes albidi; alæ anticæ fusco triguttatæ, subtus posticæque roseæ.

Fawn-colour. Body whitish beneath. Palpi rose-colour, brown on the outside except at the base. Proboscis tawny. Abdomen rose-colour above. Legs whitish; coxæ and femora somewhat rosy. Fore wings with two brown dots in the disk near the base, and with one beyond and nearer the fore border; under side rosy except towards the tips. Hind wings rosy. Length of the body 5 lines; of the wings 13 lines.

a. Parà. From Mr. Bates' collection.

Genus 95. PERCOTE.

Mas. Corpus validiusculum, longiusculum. Palpi arcuati, ascendentes, capite non breviores; articulus 3us gracilis, linearis, 2i quadrario non longior. Proboscis brevis. Antennæ subpectinatæ. Abdomen alas posticas dimidio fere superans. Pedes sat robusti. Alæ angustæ, non longæ; anticæ ad costam rectæ, apices versus conicæ, postice rotundatæ non angulatæ, venis 1a et 2a inferioribus basi contiguis, 3a approximata, 4a remota.

Male. Body rather thick and long. Palpi curved, ascending, as long as the head; third joint slender, linear, not more than one-fourth of the length of the second. Proboscis short. Antennæ minutely pectinated. Abdomen extending for nearly half its length

beyond the hind wings. Legs rather stout, mutilated in the specimen described, with four? spurs of moderate length. Wings narrow, not long. Fore wings straight in front, conical towards the tips, rounded and not angular behind; first and second inferior veins contiguous at the base, third about thrice further from the fourth than from the second.

1. PERCOTE SIGNATURA.

Fusca; caput et thorax luteo bimaculata; palpi subtus basi lutei; abdomen luteum, subtus testaceum; alæ anticæ striga obliqua antica limpida; posticæ cinereo-hyalinæ fusco late marginatæ.

Brown. Head with a luteous spot on each side behind the vertex. Palpi luteous beneath towards the base. Proboscis tawny. Thorax with a luteous spot on each side. Abdomen luteous above, pale testaceous beneath. Coxæ luteous. Fore wings with a short oblique limpid streak near the fore border and before the middle of the length. Hind wings grayish hyaline with broad brown borders. Length of the body 5 lines; of the wings 14 lines.

a. West Indies.

Genus 96. LITHOSIA.

Palpi breves, squamosi, biarticulati; articulus 1us magnus, attenuatus, supra curvus, 2o triplo longior; 2us minutus, subrhomboideus aut elongato-trigonus. Maxillæ antennis longiores. Antennæ simplices, *maris* setosæ. Alæ anticæ oblongæ, subellipticotruncatæ; posticæ opacæ. Pedes mediocres; tibiæ breves, graciles.

Noctua, p., *Linn.*; *Esper.*
Tinea, p., *Fabr.*
Bombyx, p., *Hübn.*
Lithosia, p., *Fabr.*; *Haw.*; *Leach*; *Ochs.*; *Curt.*; *Steph.*; *Meig.*; *Boisd.*; *Westw.*; *Herr-Schæff.*
Setina, p., *Schr.*
Callimorpha, p., *Latr.*

Most of the European species are thus grouped by Herrich-Schæffer:—

I. Alæ innotatæ.

A. Vitellinæ.

Unita, gilveola, aureola, luteola, cereola.

B. Flavescentes, alarum anticarum solum margo anticus et ciliæ.
complana, plumbeola, morosina, arideola.
C. Luteæ ciliis mitellinis, alarum margine antico solum versus basin et apicem flavescente.
helvola.
D. Cinereo-ochraceæ, ciliis et margine antico alarum anticarum apicem versus attenuato, ochraceis.
depressa.
E. Cinereæ; alæ posticæ paullo pallidiores, anticæ linea costali tenuissime flavescente.
griseola, caniola.

II. Alæ anticæ puncto medio serieque punctorum pone hoc.
muscerda.

1. Lithosia gigas.

Nigra; caput luteum; thorax luteo varius; abdomen maculis lateralibus aut fasciis albis, ventre apiceque luteis; alæ anticæ strigis maculisque albis strigaque basali cyanea; posticæ sæpissime dimidio basali albo.

Male and Female. Black. Head and palpi luteous. Proboscis piceous. Antennæ blue at the base. Thorax luteous in front and along part of each side and beneath. Abdomen with white bands or lateral spots on the hind borders of the segments, bluish towards the tip; under side and tip luteous. Legs rather long and stout; coxæ with luteous hairs; hind tibiæ with four rather long spurs. Fore wings with a blue streak and a white dot at the base, with a white streak near the base, with two white spots in the disk, and with seven white streaks near the tips; first and second inferior veins contiguous at the base; third about four times further from the fourth than from the second. Hind wings white for more than half the length from the base. Length of the body 10—12 lines; of the wings 30—34 lines.

Var. β. Abdomen beneath black, with luteous bands. Hind wings white for less than half the length from the base.

Var. γ. Fore wings with two white streaks near the base, and with three white dots instead of seven white spots near the tips.

Var. δ. Fore and hind wings quite black except three white dots near the tips of the fore wings.

Var. e. Tip of the abdomen gray.

a, *b*. Silhet. From the Rev. J. Stainforth's collection.
c. Silhet. From Mr. Argent's collection.
d. ——— ?

2. Lithosia Entella.

Testaceus; antennæ nigræ; thoracis discus viridis; alæ anticæ costa fasciisque duabus latis antice excavatis et connexis viridibus; femora apice, tibiæ tarsique viridia subtus testaceo vittata.

Phalæna Tinea Entella, *Cram. Pap. Exot.* iii. 27, pl. 208, f. D.
Noctua Delia, *Fabr. Ent. Syst.* iii. 2, 25. *Donov. Epit. Ins. New Holl.* pl.
Oenistis Entelliola, *Hübn. Verz. Schmett.* 165, 1703.
Lithosia Delia, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 209, 1.

Like *L. quadra* in structure, but with much longer and narrower fore wings.

Testaceous. Antennæ and palpi black. Proboscis ferruginous. Disk of the thorax metallic green. Fore wings with the costa nearly to the tip and with two very broad bands metallic green; the bands are connected by the costa, and are excavated in front for more than two-thirds of their breadth, the second is apical. Femora towards the tips, tibiæ and tarsi metallic green; hind tibiæ partly and hind tarsi testaceous beneath. Length of the body 6 lines; of the wings 19 lines.

a. East Indies. From Mr. Stevens' collection.

3. Lithosia signata.

Albido-testacea; palpi apice, antennæ thoracisque discus nigra; tibiæ tarsique fuscescentia; alæ subtus flavo-testaceæ, anticæ nigro bimaculatæ.

Whitish testaceous. Palpi with black tips. Proboscis tawny. Antennæ black. Thorax with a black disk. Tibiæ and tarsi brownish. Wings beneath yellowish testaceous. Fore wings with a large black spot in the middle by the hind border, and a smaller one by the fore border and nearer the tip of the wing. Length of the body 5 lines; of the wings 16 lines.

a. Shanghai, North China. From Mr. Fortune's collection.

4. Lithosia quadra.

Alæ anticæ maris *lividæ basi fulvæ, costa cæruleo-nigra ;* fœminæ *luteæ, punctis duobus atro-cæruleis.*

Noctua quadra, *Linn. Syst. Nat.* i. 2, 840, 114. *Gron. Zooph.* 870. *Roes. Ins.* i. *Phal.* 2, pl. 17, f. 1—5. *Poda, Mus. Græc.* 89, 18, pl. 2, f. 8. *Wilkes, Nat. Hist.* pl. 52. *Sepp, Neederl. Ins.* pl. 6, f. 1—8. *Schæff. Elem.* pl. 98, f. 5; *Icon.* pl. 29, f. 9, 10; pl. 102, f. 1, 2; *Wien. Verz.* 68, *Fam.* C, i. *Illig. N. Ausg. dess.* i. 173, 1; *Mag.* ii. 79, 1. *Fabr. Sp. Ins.* ii. 214, 28; *Mant. Ins.* ii. 139, 40; *Ent. Syst.* iii. 2, 24, 54. *Scop. Ent. Carn.* 210, 590. *Müller, Faun. Fridr.* 43, 382; *Zool. Dan.* 120, 1389. *Fuessl. Schweiz. Ins.* 37, 705. *Gmel. ed. Syst. Nat.* i. 5, 2553, 114. *Esper, Schmett.* iv. 92, pl. 92, f. 2; *Pap. d'Eur.* vi. 31, pl. 217, f. 298. *Schr. Faun. Boic.* ii. 1, 311, 1504. *Panz. Faun. Germ.* 78, 23, 24. *Vieweg, Tab. Verz.* ii. 8, 1; *Nachtr.* 93, 1. *Hufnagel, Pl. Berl. Mag.* iii. 2, 208, 9; 4, 420; *Naturf.* iii. 20, iii. ix. iii. 9. *Lang. Verz.* ii. 164, 1151, 1152. *Schwarz, Raup.* 277, 713, 765. *Berk. Syn.* i. 139. *Stew. Elem.* ii. 185. *Turt. Syst. Nat.* iii. 292. *Don. Nat. Hist. Brit. Ins.* ii. 185.

Noctua deplana, *Linn. Mantiss.* i. 539 (*mas*). *Fabr. Ent. Syst.* iii. 2, 24, 54. *β. Rossi, Faun. Etr.* ii. 179, 1108; *ed. Illig.* 285, 1108.

Bombyx quadra, *Hübn. Bomb.* 127, 13, pl. 24, f. 101, 102; *Larv. Lep.* iii. *Bomb.* 2. *Veræ*, F, d, f. 2, b, c. *Borkh. Eur. Schmett.* iii. 239, 76. *Rhein Mag.* i. 352, 199. *Brahm. Ins. Kal.* 485, 347.

Setina quadra, *Schr. Faun. Boic.* ii. 165, 1.

Lithosia quadra, *Fabr. Ent. Syst. Suppl.* 459, 1. *Haw. Lep. Brit.* 146. *Ochs. Schmett.* iii. 1261; iv. 52, 1. *God. Pap. de France*, v. pl. 41, f. 2—4. *Meig. Syst. Beschr. Eur. Schmett.* iii. 48, 4, pl. 88, f. 1. *Steph. Ill. Brit. Ent. Haust.* ii. 97, 10. *A. et O. Speyer, Isis*, 1843, 189. (*Boie, Verz. Dan. Schmett. Kroyer, Nat. Tidskrift*, 1841.) *Isis*, 1841, 172, 1. *Koch, Raup. und Schmett. Witterau*, 468. *Lienig, Lep. Faun. von Lievland und Curland. Costa Faun. Regn. Napoli.*

Lithosia deplana, *Fabr. Ent. Syst. Suppl.* 459.

Oeonistis quadra, *Hübn. Verz. Schmett.* 165, 1704.

Gnophria quadra, *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 161, 25.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g—j. Europe. From M. Becker's collection.

5. Lithosia insolita.

Testacea; palpi apice nigri; antennæ, tibiæ supra tarsique fusca; thorax albidus, antice testaceus; alæ albido suffusæ.

Testaceous. Palpi with black tips. Antennæ brown. Thorax whitish except in front. Tibiæ above and tarsi brown. Wings above with a whitish bloom. Length of the body 6—7 lines; of the wings 18—19 lines.

a, b. Shanghai, North China. From Mr. Fortune's collection.

6. Lithosia griseola.

Major; alæ latiores; anticæ plumbeo-cinereæ, stria costali lutea, summo margine nigro; posticæ lutescentes.

Bombyx griseola, *Hübn. Bomb.* 126, pl. 23, f. 97; *Pap. d'Eur.* vi. 41, pl. 219, f. 303.

Lithosia griseola, *Ochs. Schmett.* iii. 128, 2. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 26, 9, pl. 2, f. 3. *Treits. Suppl. Ochs. Schmett.* x. 1, 161. *Zeller, Isis*, 1840, 210, 60. *Freyer, Neue Beitr. Schmett.* iv. 159, 651, pl. 380, f. 2. *Steph. Ill. Brit. Ent. Haust.* ii. 96, 7. *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 160, 22. *A. et O. Speyer, Isis*, 1843, 189. *Lienig, Lep. Faun. von Livland und Curland, Kroyer's Nat. Tidskrift*, 1844.

Pelosia griseola, *Hübn. Verz. Schmett.* 165, 1708.

Var.? *Alæ anticæ cinereo-plumbescentes, costa tenuissime flavescente; posticæ cinereo-flavæ.*

Lithosia plumbeolata, *Steph. Ill. Brit. Ent. Haust.* ii. 96, 8.

Europe. North China.

a—d. England. From Mr. Stephens' collection.
e—h. England.
i—n. Europe. From M. Becker's collection.

7. Lithosia flava.

Alæ omnes undique flavæ immaculatæ.

Lithosia flava, *Fabr. Ent. Syst. Suppl.* 461. *Haw. Lep. Brit.* 147. *Steph. Ill. Brit. Ent. Haust.* ii. 95, 3.

Var. *Alæ quatuor stramineæ, immaculatæ.*

Lithosia stramineola, *H. Doubleday, Zoologist*, v. 1914, 1.

a—c. England. From Mr. Stephens' collection.
d, e. England.

8. Lithosia complana.

Alæ anticæ angustæ cinereæ nitidæ, costa latius et æqualiter flava; posticæ flavidæ.

Noctua complana, *Linn. Syst. Nat.* i. 2, 840, 115; *Faun. Suec.* 1153. *Geoffr. Ins.* ii. 191, 22. *Schæff. Icon.* pl. 266, f. 1, 2. *Fabr. Sp. Ins.* ii. 214, 27; *Mant. Ins.* ii. 139, 39; *Ent. Syst.* iii. 2, 24, 53. *Esp. Schmett.* iv. 95, pl. 92, f. 7, 23; pl. 185, f. 9—15; *Pap. d'Eur.* vi. 37, pl. 218, f. 301. *Gmel. ed. Syst. Nat.* i. 5, 2553, 115. *Schr. Faun. Boic.* ii. 1, 313, 1507. *Wien. Verz.* 68, *Fam.* C, 4. *Hübn. Beitr.* i. 3, 12, pl. 1, f. F; *B. Nachtr.* 115. *Illig. N. Ausg. dess.* i. B, 8, 174; *Mag.* ii. 79, 4. *Schwarz, Beitr.* 13, pl. 2, f. 10—14. *Raup.* 106, 279. *Fuessl. Schweiz. Ins.* 37, 706. *Rossi, Faune Etr. Mantiss.* 21, 384. *Vieweg, Tab. Verz.* ii. 8, 2. *Nachtr.* 93, 2. *Hufnagel, Pl. in Berl. Mag.* iii. 2, 210, 10. *Albin, Nat. Hist. Engl. Ins.* pl. 70, f. e—h. *Stew. Elem.* ii. 186. *Turt. Syst. Nat.* iii. 292. *Clerck, Icon.* pl. 9, f. 7.

Setina complana, *Schr. Faun. Boic.* ii. 165, 6.

Bombyx complana, *Borkh. Eur. Schmett.* iii. 243, 77. *Rhein. Mag.* i. 351, 198. *Hübn. Bomb.* pl. 24, f. 100; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, F, a, b, f. 2.

Bombyx plumbeola, *Hübn. Bomb.* 127, 12, pl. 24, f. 100.

Lithosia complana, *Fabr. Ent. Syst. Suppl.* 460, 3. *Ochs. Schmett.* iii. 129, 3; iv. 52, 3. *God. Pap. de France*, v. pl. 41, f. 5. *Haw. Lep. Brit.* 147. *Leach, Zool. Misc.* i. pl. 49, f. 3. *Meig. Handb.* 117, 3; *Syst. Beschr. Eur. Sch.* iii. 48, 6. *Steph. Ill. Brit. Ent. Haust.* ii. 95, 5. *Zett. Ins. Lapp.* 932, 1. *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 158, 11. *Croch. Règ. Anim. Atlas, Ins.* pl. 153 bis, f. 2. *Zeller, Isis*, 1847, 16. *Freyer, Neue Beitr. Schmett.* iv. 158, 650, pl. 380, f. 1. *A. et O. Speyer, Isis*, 1843, 189. *Koch, Raup. und Schmett. Witterau*, 470. *Lienig, Lep. Faun. von Lievland und Curland.*

Pelosia plumbeola, *Hübn. Verz. Schmett.* i, 5, 165, 1709.

Lithosia complanata, *Costa, Faun. Regn. Napoli.*

a—d. England. From Mr. Stephens' collection.
e—h. England.
i, j. Europe. From M. Becker's collection.

9. Lithosia costalis.

Alæ anticæ angustæ cinereæ, costa anguste et æqualiter flava; posticæ flavidæ.

Lithosia costali, *Zeller, Isis*, 1847, 15, 64.

Brussa.

10. Lithosia plumbeola.

Alæ anticæ fusco-plumbeæ, stria costali ochracea, versus apicem attenuata.

Lithosia plumbeola, *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 158, 17.

Lithosia lurideola, *Treits. Suppl. Ochs. Schmett.* x. 1, 162. *Eversm. Faun. Lep. Volgo-Ural.* 132, 4. *Lienig, Lep. Faun. von Liev. und Curl. Fischer V. Rösl. Ent. Zeit. Stett.* iv. 118.

Lithosia complanula, *Boisd. Icon.* ii. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 15, 4, pl. 1, f. 4. *Koch, Raup. und Schmett. Witterau*, 481.

a—d. England. From Mr. Stephens' collection.

e—h. England.

i—l. Europe. From M. Becker's collection.

11. Lithosia caniola.

Minor; alæ angustiores, anticæ canæ, stria costali ochracea; posticæ albidæ.

Bombyx albula, *Hübn. Bomb.* 284, 285.

Bombyx caniola, *Hübn. Bomb.* 126, 11, pl. 81, f. 220; *Larv. Lep.* iii. *Bomb.* 2. *Veræ*, F, a, b, f. 2.

Eilema caniola, *Hübn. Verz. Schmett.* 165, 1710.

Lithosia caniola, *Ochs. Schmett. Eur.* iv. 196, 6. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 22, 7, pl. 2, f. 1. *Costa, Faun. Reg. Napoli. Boisd. Icon.* pl. 57, f. 6. *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 160, 23. *Zeller, Isis*, 1847, 431, 99.

South Europe. Corsica. Asia Minor.

a—d. Europe. From M. Becker's collection.

Var. Lithosia lacteola, *Ramb. Boisd. Icon.* 100, pl. 58, f. 4. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 38, 15, pl. 3, f. 3.

Corsica.

12. Lithosia helveola.

Mas. *Alæ anticæ lividæ, cinereo fulvoque marginatæ.*

Noctua deplana, *Esp. Schmett.* iv. 97, pl. 93, f. 1, 2; *Pap. d'Eur.* vi. 38, pl. 2118, f. 302. *Lang. Verz.* ii. 168, 1156, 1157. *Schr. Faun. Boic.* ii. 1, 313.

Bombyx deplana, *Borkh. Eur. Schmett.* iii. 245, 78; *Rhein. Mag.* i. 351, 177.

Setina deplana, *Schr. Faun. Boic.* ii. 166, 6.

Bombyx helveola, *Hübn. Bomb.* 125, 6, pl. 23, f. 95.

Lithosia helveola, *Ochs. Schmett.* iii. 133, 5. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 24, 8, pl. 2, f. 2. *Treits. Suppl. Ochs. Schmett.* x. 1, 165. *Steph. Ill. Brit. Ent. Haust.* iii. 94, 2. *Herr-Schæff. Samml. Exot. Schmett.* ii. *Text*, 159, 20. *Freyer, Neue Beitr. Schmett.* iv. 160, 654, pl. 380, f. 5. *A. et O. Speyer, Isis*, 1843, 189. *Koch, Raup. und Schmett. Witterau*, 476. *Schreiner, Ent. Zeit. Stett.* 1852. *Lienig, Lep. Faun. von Lievl. und Curland.*

Pelosia helveola, *Hübn. Verz. Schmett.* 165, 1706.

Europe. North China.

13. Lithosia depressa.

Alæ anticæ cinereo-plumbescentes, margine anteriore luteo; posticæ utrinque flavæ basi cinerascente.

Lithosia helveola, *Fœm.?*

Noctua depressa, *Esper, Schmett.* iv. 98, pl. 93, f. 3. *Lang. Verz.* ii. 165, 1158.

Bombyx depressa, *Borkh. Eur. Schmett.* iii. 246, 79; *Rhein. Mag.* i. 351, 196.

Setina depressa, *Schr. Faun. Boic.* ii. 2, 166, 7.

Bombyx ochreola, *Hübn. Bomb.* 126, 7, pl. 23, f. 96; *Larv. Lep.* iii. *Bomb.* 2. *Verœ*, F, a, b, f. 1, a.

Noctua luteola, *Hübn. Beitr.* i. 3, 11, pl. 1, f. E; ii. *Nachtr.* 115, E.

Lithosia depressa, *Ochs. Schmett.* iii. 132, 4. *Treits. Suppl. Ochs. Schmett.* x. 1, 164. *Steph. Ill. Brit. Ent. Haust.* ii. 96, 6. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 18, 5, pl. 1, f. 6. *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 159, 21. *Freyer, Neue Beitr. Schmett.* iv. 161, 655, pl. 380, f. 6. *Koch, Raup. und Schmett. Witterau*, 475.

Pelosia depressa, *Hübn. Verz. Schmett.* 165, 1707.

a—d. England. From Mr. Stephens' collection.
e—h. England.
i—l. Europe. From M. Becker's collection.

14. Lithosia unita.

Pallide ochracea, subtus cinerascens, alarum anticarum disco, posticarum dimidio antico cinerascentibus.

Phalæna Tinea lutarella, *Fabr. Sp. Ins.* ii. 591, 13; *Mant. Ins.* ii. 242, 19; *Ent. Syst.* iii. 292, 23. *Gmel. ed. Syst. Nat.* i. 5, 2588, 355.
Noctua lutarella, *Wien. Verz. Schmett.* 68, 3. *Clerck, Icon.* pl. 4, f. 9.
Noctua unita, *Wien. Verz. Schmett.* 68, 2.
Bombyx unita, *Hübn. Bomb.* 125, 4, pl. 23, f. 93; pl. 51, f. 221; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, F. d, f. 1, *Fœm.*
Bombyx palleola, *Hübn. Bomb.* 125, 3, pl. 51, f. 221, *Mas.*
Lithosia unita, *Ochs. Schmett.* iii. 135, 6. *Meig. Syst. Beschr. Eur. Schmett.* iii. 50, 7, pl. 88, f. 4. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 20, 6, pl. 1, f. 7. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* f. 52, 53. *Zeller, Ent. Zeit. Stett.* viii. 338. *Hering, Ent. Zeit. Stett.* ix. 103.
Lithosia palleola? *Hering, Ent. Zeit. Stett.* ix. 103.

a—e. Europe. From M. Becker's collection.

15. Lithosia gilveola.

Alæ anticæ pallide luteæ, costa luteo-fulvescente; caput, thorax et abdominis apex luteo-fulva; alæ anticæ subparallelæ angustiores, subtus fuscæ costa apiceque luteis.

Lithosia gilveola, *Ochs. Schmett. von Eur.* iii. 137. *Steph. Ill. Brit. Ent. Haust.* ii. 95, 4. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 34, 13, pl. 3, f. 1. *Zeller, Ent. Zett. Stett.* viii. 339. *Hering, Ent. Zeit. Stett.* ix. 104.

a, b. Europe. From M. Becker's collection.

16. Lithosia cinereola.

Mas. *Nigricans, vertice, scapulis anoque ochraceis; alæ ochraceæ, anticæ latiusculæ, sensim dilatatæ, circa margines saturatius coloratæ.*

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Bombyx cinereola, *Hübn. Bomb.* pl. 23, f. 91.
Lithosia cinereola, *Boisd. Icon.* 104. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 158, 12. *Zeller, Ent. Zeit. Stett.* viii. 339.
Austria.

17. Lithosia luteola.

Vitellina; alæ posticæ dimidio antico utrinque, anticæ disco subtus et abdomen basi fuscescentia.

Phalæna Tinea lutarella, *Linn. Syst. Nat.* ii. 886, 355; *Faun. Suec.* 353, 1360. *Fabr. Ent. Syst.* iii. 2, 292, 23. *Clerck, Icon.* pl. 4, f. 9; *Pap. d'Eur.* vi. 36, pl. 218, f. 300. *Müller, Faun. Fridr.* 55, 486; *Zool. Dan.* 134, 1659. *Schwarz, Raup.* 332. *Rossi, Faun. Etr.* ii. 204, 1216, *ed. Illig.* 329, 1216.
Noctua luteola, *Wien. Verz. Schmett.* 68, 3. *Schr. Faun. Boic.* ii. 1, 313, 1508. *Illig. N. Ausg.* i. 175, 3. *Lang. Verz.* ii. 165, 1159, 1166. *Vieweg, Pl. Verz.* ii. 9, 4.
Noctua lutosa, *Esp. Schmett.* iv. 100, pl. 93, f. 8, 9.
Bombyx luteola, *Borkh. Schmett.* iii. 248, 81; *Rhein. Mag.* i. 350, 194. *Hübn. Bomb.* 125, 2, pl. 23, f. 92.
Lithosia lutea, *Fabr. Ent. Syst. Suppl.* 461, 11.
Setina luteola, *Schr. Faun. Boic.* ii. 3.
Lithosia luteola, *Ochs. Schmett.* iii. 138, 8. *Meig. Syst. Beschr. Eur. Schmett* iii. 51, 9, pl. 88, f. 7. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 28, 10, pl. 2, f. 4. *Guér. Icon. Règne Anim. Ins.* pl. 88, f. 7. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 158, 14. *Freyer, Neue Beitr. Schmett.* iv. 160, 653, pl. 380, f. 4. *A. et O. Speyer, Isis*, 1843, 189. *Koch, Raup. und Schmett. Witterau*, 476. *Lienig, Lep. Faun. von Lievl. und Curland. Zeller, Ent. Zeit. Stett.* viii. 337.

Var. *Cinerea; alæ anticæ angustissimæ, margine anteriore stramineo; posticæ albicantes, margine anteriore late cinereo.* Long. alar. 10 lin.

Lithosia pygmeola, *H. Doubleday, Zoologist.* v. 1914, 2.

a—d. England. From Mr. Stephens' collection.
e. Europe. From M. Becker's collection.
f. Polish Ukraine. Presented by Dr. Dowler.

18. Lithosia vitellina.

Flava; abdomen cinerascens, apice flavum.

Lithosia vitellina, *Boisd. Icon.* 105, pl. 57, f. 9, 10. *Treits. Suppl. Ochs. Schmett.* x. 1. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 30, 11, pl. 2, f. 5. *Zeller, Isis*, 1847, 16, 65. *Hering, Ent. Zeit. Stett.* ix. 106.

Austria. Asia Minor.

19. Lithosia aureola.

Nigricans; abdomen apice vitellinum; alæ anticæ luteo-fulvæ, subtus disco fusco; posticæ utrinque flavæ.

Noctua unita, *Esp. Schmett.* iv. 100, pl. 93, f. 6, 7; *Pap. d'Eur.* vi. 35, pl. 218, f. 299. *Geoffr. Hist. Ins.* ii. 192, 24. *Fuessl. R. Mag.* ii. 212. *Schr. Faun. Boic.* ii. 1, 312, 1505. *Lang. Verz.* ii. 165, 1161, 1162. *Schwarz, Raup.* 308, 449. *Illig. N. Ausg. des Wien. Verz.* i. 174, 2. *Hübn. Beitr.* i. 1, 29, pl. 4, f. 5; ii. 110, 5.

Bombyx unita, *Borkh. Eur. Schmett.* iii. 246, 80; *Rhein. Mag.* i. 350, 195. *Brahm, Ins. Kal.* 399, 279.

Setina unita, *Schr. Faun. Boic.* ii. 165, 2.

Bombyx aureola, *Hübn. Bomb.* 126, 9, pl. 24, f. 98: *Larv. Lep.* iii. *Bomb.* 2. *Veræ*, F. c, f. 1.

Noctua luteola, *Vieweg, Tab. Verz.* ii. 9, 4.

Lithosia aurantia, *Haw. Lep. Brit.* 147. *Curt. Brit. Ent.* i. 36.

Lithosia aureola, *Ochs. Schmett. von Eur.* iii. 140, 9; iv. 52, 10. *Steph. Ill. Brit. Ent. Haust.* ii. 94, 1, pl. 18, f. 1. *God. Pap. de France*, iii. pl. 40, f. 5. *Meig. Handb. Ent.* 118, 34; *Syst. Beschr. Eur. Schmett.* iii. 50, 8, pl. 88, f. 5. *A. et O. Speyer, Isis*, 1843, 189. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 158, 13. *Freyer, Neue Beitr. Schmett.* iv. 159, 652, pl. 380, f. 3. *Koch, Raup. und Schmett. Witterau*, 481. *Costa, Faun. Regn. Napoli.*

a—d. England. From Mr. Stephens' collection.

e, f. England.

g, h. Europe. From M. Becker's collection.

20. Lithosia muscerda.

Alæ anticæ cinereæ, punctis tribus anticis duabusque posticis oblique dispositis nigris.

Tinea perlella, *Fabr. Mant. Ins.* ii. 241, 17; *Ent. Syst.* iii. 2, 292, 21. *Gmel. ed. Syst. Nat.* i. 5, 2588, 1208. *Rossi, Faun. Etr.* ii. 205, 1221; *ed. Illig.* 330, 1221.

Lithosia perla, *Fabr. Ent. Syst. Suppl.* 462, 14.

Noctua cinerina, *Esp. Schmett.* ii. 2, 67.

Noctua pudorina, *Esp. Schmett.* iv. pl. 196, f. 4, 5.

Bombyx muscerda, *Hübn. Bomb.* 127, 14, pl. 24, f. 103. *Borkh. Eur. Schmett.* iii. 250, 83; *Rhein. Mag.* i. 349, 193.

Phalæna muscerda, *Hufnagel, Tab. in Berl. Mag.* iii. 4, 400, 73. *Naturf.* ix. 133, 73.

Noctua muscerda, *Vieweg, Tab. Verz.* ii. 10, 6. *Nachtr.* 93, 6.

Lithosia muscerda, *Ochs. Schmett.* iii. 143, 11; iv. 52, 12. *Curt. Brit. Ent.* i. pl. 36. *Steph. Ill. Brit. Ent. Haust.* ii. 97, 9. *Meig. Handb.* 118, 36; *Syst. Beschr. Eur. Schmett.* iii. 51, 10, pl. 88, f. 6. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 160, 24. *Duponch. Hist. Nat. Lép. Fr. Suppl.* 32, 12, pl. 2, f. 6. *Lienig, Lep. Faun. von Liev. und Curl. Costa, Faun. Regn. Napoli.*

a, *b*. England. From Mr. Stephens' collection.

c. England.

d—*g*. Europe. From M. Becker's collection.

21. Lithosia arideola.

Minor; alæ anticæ cinereo-plumbeæ, stria costali æquilata ochracea; posticæ lutescentes, dimidio antico dilute cinereo.

Lithosia arideola, *Hering, Ent. Zeit. Stett.* vii. 233, 2. *Herr.-Schæff. Eur. Schmett.* ii. *Text*, 159, 19; *Suppl.* 57, 59. *Freyer, Neue Beitr. Schmett.* pl. 494, f. 1. *Hering, Ent. Zeit. Stett.* v. 415; ix. 105.

North Germany.

a, *b*. Europe. From M. Becker's collection.

22. Lithosia morosina.

Major; alæ anticæ cinereo-plumbeæ, stria costali æquilata et marginis interioris basali ochraceis.

Lithosia morosina, *Keferstein, Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 159, 18; *Suppl.* f. 54—56. *Hering, Ent. Zeit. Stett.* ix. 106.

Lithosia costalis, *Zeller, Isis*, 1847, 16.

Constantinople.

23. Lithosia cereola.

Ochracea; alæ anticæ disco cinerascente; thorax et abdomen cinerea.

Lithosia cereola, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 158, 15. *Zeller, Ent. Zeit. Stett.* viii. 337. *Hering, Ent. Zeit. Stett.* ix. 107.

Bombyx cereola, *Hübn. Samml. Eur. Schmett.* 126, 10, pl. 24, f. 99.

Lithosia Stoberi, *Mann.*

Germany.

24. Lithosia vicaria.

Cinerea; caput et prothorax lutea; abdomen apicem versus subtusque testaceum; pedes fusci, postici testacei; alæ anticæ testaceo marginatæ, costa lutea; posticæ testaceæ.

Nearly allied to *L. lurideola*, but the abdomen is clothed with testaceous hairs, whereas in *L. lurideola* it is clothed with white hairs and at the tip with luteous hairs.

Gray. Head, prothorax, proboscis and palpi luteous, the latter black towards the tips. Antennæ brown. Abdomen testaceous towards the tip and beneath. Legs testaceous; femora towards the tips, fore tibiæ and fore tarsi brown. Fore wings with a testaceous fringe at the tips, and a testaceous stripe along the costa which is luteous. Hind wings testaceous. Length of the body 4 lines; of the wings 14 lines.

a. Congo. Presented by Sir J. Richardson.

25. Lithosia antica.

Flavido-testacea, robusta; caput et prothorax lutea; palpi apice nigricantes; antennæ fuscæ; thoracis discus cinereus; tibiæ tarsique anteriora genuaque supra nigricantia; alæ anticæ cinereæ, vitta lata costali margineque angusto apicali testaceis.

Yellowish testaceous, stout. Thorax in front and head luteous. Palpi with blackish tips. Antennæ brown. Disk of the thorax gray. Knees and anterior tibiæ and tarsi blackish above. Fore wings gray, with a broad testaceous stripe in front and a narrower one at the tips. Length of the body 4½ lines; of the wings 12 lines.

a. Ceylon. Presented by R. Templeton, Esq.

26. Lithosia saxeola.

Cinerea; alæ anticæ vittis duabus, una antica, altera discali albis.

Achroia saxeola (Phalæna vera, Lithosia tineiformis), *Hübn. Samml. Exot. Schmett.* ii. 12, 121, f. 241, 242.

Surinam.

27. Lithosia serva.

Pallide cinerea; caput et prothorax pallide lutea; abdomen apicem versus subtusque testaceum; pedes testacei, antici fusci; alæ anticæ apud costam posticæque omnino testaceæ.

This species apparently hardly differs from *L. griseola*, but the antennæ are rather longer and thicker.

Pale gray. Head and prothorax pale luteous. Palpi black towards the tips. Proboscis tawny. Antennæ brown. Abdomen testaceous towards the tips and beneath. Legs testaceous; fore legs mostly brown. Fore wings testaceous along the costa. Hind wings testaceous. Length of the body 4½ lines; of the wings 15 lines.

a—c. Nepaul. Presented by Major-General Hardwicke.

28. Lithosia vetusta.

Testacea; caput fere album; thorax, pectus et alæ supra albido-testacea; palpi apice nigri; antennæ, tibiæ tarsique fusca.

Testaceous. Head almost white. Thorax, pectus and wings above whitish testaceous. Palpi with black tips. Antennæ, tibiæ, and tarsi brown. Length of the body 4½ lines; of the wings 13 lines.

a. Shanghai, North China. From Mr. Fortune's collection.

29. Lithosia bicosta.

Cinerea; caput luteum; antennæ piceæ; alæ anticæ vitta costali alba, costa lutea; posticæ flavæ.

Not differing in structure from *L. complana*, *lurideola* and *vicaria*, but distinct in the colour of the body and of the costa.

Gray. Head luteous. Antennæ piceous. Abdomen with a whitish tinge. Fore legs dark gray. Fore wings with a slender

white band along the costa which is luteous. Hind wings yellow. Length of the body 3½ lines; of the wings 12 lines.

a. Sydney. From Mr. Lambert's collection.

30. Lithosia nana.

Testacea; caput antice albidum; antennæ fuscæ; tibiæ tarsique antica fusca; alæ anticæ albidæ.

Like *L. bicosta* in structure.

Testaceous. Head whitish in front. Proboscis and palpi tawny. Antennæ, fore tibiæ and fore tarsi brown. Fore wings whitish; under side testaceous except towards the middle. Length of the body 3 lines; of the wings 10 lines.

a. Sydney. From Mr. Lambert's collection.

31. Lithosia plana.

Prothorax flavus; thorax cinereus; alæ anticæ cinereo-luteæ, immaculatæ; posticæ luteæ.

Lithosia plana, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 209, 2.

New Holland.

32. Lithosia pygmæa.

Alba; caput luteum; antennæ nigræ; abdomen testaceum; pedes testacei, tibiis tarsisque anticis fuscis; alæ posticæ testaceæ.

Most like *L. aureola* in structure.

White. Head luteous. Proboscis and palpi testaceous, the latter with black tips. Antennæ black. Abdomen and legs testaceous. Fore tibiæ and fore tarsi brown. Fore wings testaceous beneath, with whitish disks. Hind wings testaceous. Length of the body 3 lines; of the wings 10 lines.

a. South Africa. Presented by Dr. A. Smith.

33. Lithosia replana.

Prothorax rufus; alæ anticæ nigricantes, costa lutea; posticæ luteæ, margine nigricante.

Larva pilosa, supra nigra, maculis rubris in lineis quatuor digestis; pilis fasciculatis, antice posticeque longioribus.

Like *L. complana* in the form of the wings, but with a much thicker body.

Phalæna replana, *Lewin, Prodrom. Ent.* 16, pl. 15.
Lithosia replana, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 210, 3.
Lithosia dispar, *Leach, Zool. Miscell.* i. 109, pl. 49, f. 1—3.

a. Sydney. Presented by Dr. A. Sinclair.

34. Lithosia fumeola.

Fusco-cinerea; abdomen fulvum; scutellum luteo marginatum; alæ anticæ testaceo marginatæ, posticæ testaceæ.

Lithosia fumeola, *Boisd. MSS.*

Much like *L. replana* in structure, but with narrower fore wings.

a. Cape. From M. Drège's collection.

35. Lithosia atratula.

Atra; prothorax, abdomen apice et alarum margo anticus ochracea.

Lithosia atratula, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1847, 3, 76, 11, pl. 5, f. 4.

Eastern Siberia.

36. Lithosia diaphana.

Nigra; prothorax et abdomen ochracea, hoc nigro maculatum; alæ latissimæ, omnes utrinque diluto fuliginoso-nigricantes, diaphanæ, concolores, ciliisque concoloribus.

Lithosia diaphana, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1848, 3, 212, 5.

Eastern Siberia.

37. Lithosia nictitans.

Albo-nitescens; alæ anticæ nigro maculatæ, subtus subcinereæ; posticæ subtus flavæ.

Lithosia nictitans, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 64, 63.

North China.

38. Lithosia nigropoda.

Flava; antennæ et pedes nigra; alæ anticæ subtus subcinereæ, flavo marginatæ.

Lithosia nigropoda, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 14, 64

North China.

39. Lithosia? striata.

Flava; thorax nigro punctatus et sanguineo striatus; abdomen sanguineum pallidius; alæ anticæ nigro punctatæ, strigis duabus cinerascentibus, venis sanguineis, subtus sanguineæ, margine externo flavæ; posticæ sanguineo-pallidæ, subtus sanguineo-flavescentes.

Lithosia striata, *Bremer und Grey, Beitr. zur Schmett. Nordlichen China's*, 14, 65.

North China.

40. Lithosia conformis.

Testacea, caput, pectus, abdomen subtus, antennæ et pedes picea.

Testaceous. Head, proboscis, palpi, antennæ, pectus and legs piceous. Abdomen piceous beneath with a whitish tinge. Length of the body 4 lines; of the wings 14 lines.

a. North India. From Mr. L. James' collection.

41. Lithosia brevipennis.

Testacea; caput, thorax, abdomen et alæ anticæ basi fulvescentia; palpi apice nigri; antennæ, tibiæ tarsique fusca; alæ anticæ breves, sat angustæ.

Testaceous. Head and thorax above, base of the abdomen and fore wings towards the base slightly tawny. Palpi with black tips. Antennæ, tibiæ and tarsi brown. Fore wings short, rather narrow. Length of the body 4½ lines; of the wings 11 lines.

a. Ceylon. Presented by R. Templeton, Esq.

42. Lithosia hirta.

Alba; antennæ fuscæ; abdomen supra testaceum, pilosum; alæ posticæ testaceæ.

White. Antennæ brown. Proboscis and palpi testaceous. Abdomen testaceous and hairy above. Fore wings long and narrow, more pointed at the tips than in the preceding species of this genus; hinder half slightly tinged with gray. Hind wings testaceous, deeply fringed along the inner border. Length of the body 6 lines; of the wings 18 lines.

a, *b*. Sydney. From Mr. Lambert's collection.

43. Lithosia longipennis.

Flava; alæ anticæ fusco marginatæ.

Yellow. Palpi brownish towards the tips. Tibiæ and tarsi brownish. Fore wings long, narrow, conical at the tips, with a very narrow brown border which is slightly widened at the tips, and does not extend further than the tips of the hind wings towards the base behind. Hind wings with a brown fringe at the tips. Length of the body 6½ lines; of the wings 18 lines.

a. Mexico. Presented by E. Doubleday, Esq.

44. Lithosia tetragona.

Pallide testacea; capitis fascia lata thoracisque discus nigro-fusca; alæ anticæ macula maxima oblonga tetragona discali guttaque costali anteapicali nigro-fuscis.

Pale testaceous. Head with a broad blackish brown band in front. Palpi with brown tips. Proboscis luteous. Antennæ brown. Fore tibiæ and tarsi with brown stripes. Fore wings fringed with brown at the tips; disks mostly occupied by a very large oblong quadrangular dark brown spot which extends to the hind border but not to the fore border; on the latter near the tip there is a small dark brown spot. This species is especially distinguished by its large head, robust thorax, and narrow but not long fore wings, which are more quadrate at the tips than those of the preceding species of *Lithosia*. Length of the body 5½ lines; of the wings 14 lines.

a. Silhet. From the Rev. J. Stainforth's collection.

45. Lithosia bicolora.

Nigra; caput et prothorax supra rubro-rosea; alæ concolores rubro-roseæ, dimidiato nigræ, fimbria rosea. Var. *Alæ anticæ striga discali nigra.*

Lithosia bicolora, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 211, 4, pl. 3, f. 9.

a, *b*. Sydney. From Mr. Lambert's collection.
c, *d*. Van Dieman's Land. Presented by — Walcott, Esq.
e. New Holland. Presented by Major-General Hardwicke.
f. New Holland. Presented by H. G. Harrington, Esq.
g. New Holland. Presented by E. Doubleday, Esq.
h. New Holland.
i. Moreton Bay. From Capt. Parry's collection.

46. Lithosia æqualis.

Nigro-viridis; alæ anticæ coccineæ, nigro-viridi marginatæ; posticæ nigræ anticæ coccineæ.

Blackish green. Fore wings crimson, with a very slender blackish green border in front and behind and with a broad blackish green border at the tip. Hind wings black, more or less crimson in front, and occasionally with a crimson streak from the base to the middle. Length of the body 4½ lines; of the wings 14 lines.

a. Guatimala.
b. ———? Presented by E. Doubleday, Esq.

47. Lithosia Liboria.

Nigra; caput et thoracis margines lutea; alæ anticæ rubræ apicibus late nigro marginatis; posticæ luteæ marginibus latis nigris.

Phalæna Liboria, *Cram. Pap. Exot.* iv. 106, pl. 345, f. D.
Apistosia Liboria, *Hübn. Verz. Schmett.* 164, 1695.
Sierra Leone.

48. Lithosia miniata.

Miniata ; abdomen medio, alæ anticæ vittis tribus, posticæque apice schisticoloribus.

Lithosia miniata, *Kirby, Fauna Bor. Amer.* iv. 305, 1.
Canada.

49. Lithosia?? annulata.

Alba ; caput et antennæ basi flava ; alæ anticæ lineis fascia obliqua undulata annuloque basali irregulari nigris, costæ dimidio basali maculaque discali flavis.

Lithosia annulata, *Guér. Icon. Règne Anim. Ins. Texte*, 519.
Vera Cruz.

50. Lithosia?? marginata.

Flava ; caput, prothorax et costa coccinea ; antennæ fuscæ, basi rufæ ; pedes anteriores nigricantes femoribus rufis, postici rosei, femoribus tibiis tarsisque apice nigris ; alæ anticæ guttis quatuor discalibus nigris.

Lithosia marginata, *Guér. Icon. Règne Anim. Ins. Texte*, 519.
Madagascar.

51. Lithosia?? mina.

Fusca ; caput rufescens supra fuscum ; palpi apice et antennæ fusca ; thoracis margo anticus rufus ; abdomen rufum, maculis nonnullis transversis ventralibus nigris ; alæ anticæ macula trigona postica lutea ad basim producta ; posticæ luteæ, nigro marginatæ.

Lithosia mina, *Guèr. Icon. Règne Anim. Ins. Texte*, 519.
Bolivia.

Genus 97. PAIDIA.

Alæ anticæ vena penultima e medio marginis antici per venam ultimam ad marginem anticum ; alæ posticæ vena 3a et 4a 6a et 7a e petiolo communi, 5a deest.

Paidia, *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 156.
Lithosia, p., *Boisd.*; *Duponch.*

1. PAIDIA MESOGONA.

Cinerea; alæ anticæ fascia angulata apud medium interrupta nigro-fusca.

Callimorpha mesogona, *God. Pap. de France*, iii. 396, pl. 40, f. 6.
Lithosia mesogona, *Meig. Syst. Besch. Eur. Schmett.* iii. 55, 19, pl. 87, f. 8.
Paidia mesogona, *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 60.

Var. *Cinereo-rufescens; alæ anticæ punctis nonnullis nigricantibus.*

Lithosia rufeola, *Rambur, Ann. Soc. Ent. Fr.* i. 271, pl. 8, f. 12. *Duponch. Hist. Nat. Lép. France, Suppl.* 36, 14, pl. 3, f. 2.

Corsica.

a—c. Europe. From M. Becker's collection.

2. PAIDIA TRANSPECTA.

Fœm. *Flavescens; alæ sordide albidæ, nigro venosæ, apice flavæ; anticæ puncto discali nigro.*

Paidia transpecta (Phalæna vera, Hypogymna subsquamata), *Geyer, Samml. Exot. Schmett.* iv. 8, 303, f. 605, 606.

Isle St. Thomas.

3. PAIDIA? TRICHOPTERA.

Flava; oculi fusci; proboscis valde elongata; palpi articulo 3o compresso, subacuminato; antennæ filiformes, fuscæ, ad basim flavicantes; pedes nigricantes, coxis et femoribus subtus flavis; alæ mellino-flavæ, præsertim ad basim sublucidæ, pilis et squamulis tenuissimis obtectæ, ad marginem et apicem saturatius tinctæ.

Lithosia trichoptera, *Perty, Del. Anim. Artic. Bras*, 161, pl. 32, f. 5.

Brazil.

4. PAIDIA? CITROSA.

Fœm. *Lutea; alæ anticæ oculo maximo, posticæ semicirculo nigricantibus.*

Paidia citrosa (Phalæna vera, Hypogymna subsquammata), *Geyer, Zutr. Samml. Exot. Schmett.* 18, 331, f. 661, 662.

Java.

Genus 98. SETINA.

Palpi breves, ascendentes, subdivaricates, subtus pilosi; articuli 1us et 2us longitudine æquales; 1us validus; 2us sublinearis; 3us minimus, subovatus. Maxillæ elongatæ. Antennæ simplices, *maris* ciliatæ. Alæ breves, deflexæ, minime decussatæ; anticæ subtrigonæ, non subtruncatæ; posticæ latæ, margine postico subemarginatæ, in *fœminis* manifeste breviores, subimperfectæ, volatu vix propriæ; in utroque sexu flavæ, nigro punctatæ aut strigosæ. Pedes mediocres; tibiæ sat graciles; posteriores quadricalcaratæ. Larva subdialis, obscura, pilis fasciculatis vestita. Pupa contracta, subventricosa

Tinea, p., *Linn.; Fabr.*
Setina, p., *Schr.; Duponch.; Boisd.; Curt.; Steph.; Westw.; Herr-Schæff.*
Callimorpha, p., *Latr.*
Lithosia, p., *Fabr.; Haw.; Hübn.; Ochs.; Meig.*
Noctua, p., *Esper.*
Cybosia et Endrosa, *Hübn.*
Philea, *Dalm.; Zett.*

Most of the European species are thus grouped by Herrich-Schæffer:—

I. Alæ anticæ puncto nigro versus medium marginis anterioris et interioris.
mesomella.
II. Alæ anticæ seriebus tribus transversis punctorum nigrorum.
A. Corpus flavum, non nigro punctatum.
flavicans, Kuhlweinii.
B. Corpus nigrum, solum prothorace scapulis et ano flavis.
a. Alæ posticæ punctis nigris nullis, aut unico tribus perparvis.
irrorella.
b. Alæ posticæ maculis antelimbalibus nigris.
roscida, aurita.
c. Corpus nigrum, solum scapulis intus et ano flavis.
melanomos.
III. Alæ anticæ strigis tribus nigris e basi, media furcata et serie macularum ante limbum.
ramosa, Andereggii.

1. SETINA ROSCIDA.

Alæ fulvæ; anticæ nigro punctatæ; posticæ maculatæ.

Tinea roscidella, *Fabr. Mant. Ins.* ii. 241, 15; *Ent. Syst.* iii. 2, 291, 19. ' *Gmel. ed. Syst. Nat.* i. 5, 2588, 1206.

Noctua roscida, Wien. Verz. 68; *Fam. C*, 7. *Illig. N. Ausg. dess. i. 178, 7; Mag.* ii. 80, 7; *Pap. d'Eur.* vi. 46, pl. 220, f. 307. *Schr. Faun. Boic.* ii. 1, 314, 1510.

Setina roscida, Schr. Faun. Boic. ii. 166, 10. *Steph. Ill. Brit. Ent. Haust.* ii. 100, 2. *Eversm. Faun. Lep. Volgo-Ural.* 135, 12. *Duponch. Cat. Lép. Eur.· Koch, Raup. und Schmett. Witterau*, 486. *Herr.-Schæff. Samml. Eur. Schmett.* 155, 5, *Suppl.* 51.

Lithosia roscida, *Fabr. Ent. Syst. Suppl.* 462. *Ochs. Schmett.* iii. 147, 13; iv. 52, 14. *Meig. Syst. Besch. Eur. Schmett.* iii. 53, 15, pl. 87, f. 4.

Bombyx roscida, *Hübn. Bomb.* 129, 5, pl. 25, f. 106, 107. *Borkh. Schmett.* iii. 257, 87. *Rhein. Mag.* i. 349, 192.

Endrosa roscida, *Hübn. Verz. Schmett.* 167, 1724.

Callimorpha roscida, *God. Pap. de France*, iii. pl. 40, f. 2.

a. Vevay. From Dr. Leach's collection.

b. Europe. From M. Becker's collection.

2. SETINA IRRORELLA.

Alæ luteæ, anticæ punctis nigris trifariis; thorax antice posticeque fulvus.

Tinea irrorella, *Linn. Syst. Nat.* ii. 885; *Faun. Suec.* 353, 1361. *Deg. Ins.* ii. 1, 248, pl. 5, f. 12. *Fabr. Sp. Ins.* ii. 291, 11; *Mant. Ins.* ii. 241, 15; *Ent. Syst.* iii. 2, 291, 18. *Sulz. Hist. Ins.* pl. 23, f. 10. *Clerck, Icon.* pl. 4, f. 5; *Pap. d'Eur.* vi. pl. 220, f. 306. *Turt. Syst. Nat.* iii. 363. *Gmel. ed. Syst. Nat.* i. 5, 2558, 354. *Müll. Zool. Dan.* 138, 1606. *Fuessl. Schweiz. Ins.* 42, 819. *Schwarz, Raup.* 146, 332.

Setina irrorea, *Schr. Faun. Boic.* ii. 166, 11. *Lang. Verz.* ii. 164. 115, 3. *Koch, Raup. und Schmett. Witterau*, 487. *Herr.-Schæff. Samml. Eur. Schmett.* 155, 4.

Noctua irrorea, *Wien. Verz. Schmett.* 68, *Fam.* C. 6. *Illig. N. Ausg. dess.* i. 177, 6. *Esp. Schmett.* iv. 103, pl. 94, f. 3, 4. *Vieweg, Tab. Verz.* ii. 93. *Nachtr.* 93, 3.

Bombyx irrorea, *Hübn. Bomb.* 128, 4, pl. 25, f. 105. *Borkh. Schmett.* iii. 253, 85. *Rhein. Mag.* i. 348, 191.

Bombyx signata, *Borkh, Eur. Schmett.* iii. 258, 88.

Lithosia irrorata, *Fabr. Ent. Syst. Suppl.* 461, 12. *Schæff. Icon.* pl. 259, f. 1, 2. *Nomencl. Panz.* 208. *Haw. Lep. Brit.* 148. *Ochs. Schmett.* iii. 148, 14; iv. 53, 15. *Meig. Handb.* 119, 38. *Syst. Beschr. Eur. Schmett.* iii. 52, 12, pl. 87, f. 1.
Callimorpha irrorata, *God. Pap. de France*, iii. pl. 40, f. 3, 4.
Philea irrorea, *Zett. Ins. Lapp.* 931, 1.
Setina irrorella, *Steph. Ill. Brit. Ent. Haust.* ii. 99, 1, pl. 17, f. 1.

a—d. England. From Mr. Stephens' collection.
e—h. England.
i—o. Europe. From M. Becker's collection.
p—r. Pyrenees. Presented by M. Pierret.
s. ——— ?

3. Setina flavicans.

Alæ posticæ ad summum puncto unico aut duobus minimis ante-apicalibus.

Bombyx flavicans, *Hübn. Bomb.* f. 344, 345.
Setina flavicans, *Boisd. Icon.* 110, pl. 58, f. 7. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 151, 2; *Suppl.* f. 48, 49.

Provence. Pyrenees.

4. Setina mesomella.

Alæ anticæ albidæ aut flavæ, margine flavo, punctisque duobus fuscis; posticæ supra nigrescentes, subtus flavæ.

Tinea mesomella, *Linn. Syst. Nat.* ii. 886; *Faun. Suec.* 354, 1362. *Geoff. Ins.* ii. 154, 89. *Fabr. Ent. Syst.* iii. 293, 25. *Turt. Syst. Nat.* iii. 364. *Clerck, Icon.* pl. 4, f. 14; *Pap. d'Eur.* vi. 42, pl. 219, f. 304. *Fuessl. Schweiz. Ins.* 42, 820. *Rossi, Faun. Etr. Mant.* ii. 44, 473.
Noctua eborina, *Hübn. Beitr.* i. 323, pl. 3, f. 2. *Nachtr.* 117, 2. *Schr. Faun. Boic.* ii. 1, 313, 1509. *Wien. Verz.* 68, *Fam.* C. 5. *Illig. N. Ausg. dess.* i. 177, 5. *Vieweg, Tab. Verz.* ii. 9, 5. *Nachtr.* 93, 5. *Fuessl. Mag.* ii. 2, 212.
Setina eborina, *Schr. Faun. Boic.* ii. 2, 166, 8. *Steph. Ill. Brit. Ent. Haust.* ii. 100, 3.
Lithosia eborina, *Fabr. Ent. Syst. Suppl.* 462, 15. *Ochs. Schmett.* iii. 152, 17.
Bombyx eborina, *Hübn. Bomb.* 127, 15, pl. 24, f. 104. *Borkh. Eur. Schmett.* iii. 251, 84. *Rhein. Mag.* i. 348, 190. *Haw. Lep. Brit.* 147.

Cybosia eborina, *Hübn. Verz. Schmett.* 167, 1723.
Setina mesomella, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 154, 1.

Var. β. Lithosia lutarella, *Haw. Lep. Brit.* 148.

a, *b*. Europe. From M. Becker's collection.
c. France.

5. Setina Kuhlweinii.

Alæ omnes maculis utrinque antelimbalibus nigris.

Bombyx Kuhlweinii, *Hübn. Bomb.* 290, 291.
Lithosia Kuhlweinii, *Treit. Schmett.* 10, 1, 167. *Fischer V. Roslerst. Beitr. Schmett.* 107, pl. 42.
Bombyx (Lithosia Kuhlweinii, *Freyer, Neue Beitr. Schmett.* v. 127, 821, pl. 459, f. 1.
Setina Kuhlweinii, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 154, 3.

North Germany.

6. Setina aurita.

Alæ luteæ; anticæ fasciis tribus macularibus nigris; posticæ maculis apicalibus nigris.

Noctua aurita, *Esp. Schmett.* iv. 102, pl. 94, f. 1; *Pap. d'Eur.* vi. 43, pl. 219, f. 305.
Tinea irrorella, *Sulz. Gesch. der Ins.* ii. 162, pl. 23, f. 10.
Bombyx aurita, *Borkh. Eur. Schmett.* iii. 255, 86.
Setina aurita, *Schr. Faun. Boic.* ii. 2, 166, 9. *Boisd. Ind. Méth. Eur. Lep.* 59. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 155, 6. *Suppl.* f. 50.
Bombyx compluta, *Hübn. Bomb.* 128, 3, pl. 25, f. 108.
Endrosa aurita, *Hübn. Verz. Schmett.* 167, 1725.
Lithosia aurita, *Ochs. Schmett.* iii. 150, 15; iv. 53, 16. *Meig. Syst. Beschr. Eur. Schmett.* iii. 52, 13, pl. 87, f. 2.
Bombyx (Lithosia) aurita, *Freyer, Neue Beitr. Schmett.* iv. 149, 641, pl. 374, f. 45.
Callimorpha aurita, *God. Pap. de France*, iii. pl. 140, f. 1.

South Europe.

7. Setina ramosa.

Lutea; alæ anticæ vittis ramosis guttisque marginalibus nigris; posticæ maculis antelimbalibus.

Bombyx ramosa, *Fabr. Ent. Syst.* iii. 1, 463, 179.
Bombyx aurita, var. *Borkh. Schmett.* iii. 255, 86, 256. *Esp. Schmett.* iv. 103, pl. 94, f. 2; *Pap. d'Eur.* vi. 43, pl. 219, f. 305.
Setina aurita, *Schr. Faun. Boic.* ii. 2, 166, 9.
Bombyx imbuta, *Hübn. Bomb.* 129, 6, pl. 25, f. 109, 110.
Lithosia ramosa, *Ochs. Schmett.* iii. 151, 16; iv. 53, 17. *Meig. Syst. Besch. Eur. Schmett.* iii. 53, 14, pl. 87, f. 3.
Endrosa ramosa, *Hübn. Verz. Schmett.* 167, 1726.
Bombyx (Lithosia) ramosa, *Freyer, Neue Beitr. Schmett.* iv. 149, 640, pl. 374, f. 1—3.
Callimorpha ramosa, *God. Pap. de France*, iii. pl. 39, f. 7.

a, *b*. Europe. From M. Becker's collection.
c—f. Vevay. From Dr. Leach's collection.

8. Setina melanomos.

Prothorax ater; alæ anticæ obscure fulvæ, nigro punctatæ, costis duabus nigris; posticæ fuscæ; scapulæ atræ.

Lithosia melanomos, *Nickerl, Ent. Zeit. Stett.* vi. 104.
Bombyx (Lithosia) melanomos, *Freyer, Neue Beitr. Schmett.* v. 128, 822, pl. 459, f. 2.
Setina melanomos, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 155, 7; *Suppl.* f. 69, 70.

Tyrol Alps.

9. Setina Freyeri.

Alæ omnes pallide olivaceæ; anticæ angustæ, punctis minimis triseriatim dispositis.

Lithosia Freyeri, *Nickerl, Ent. Zeit. Stett.* vi. 105.
Bombyx (Lithosia) Freyeri, *Freyer, Neue Beitr. Schmett.* v. 129, 823, pl. 459, f. 3.

Carinthian Alps.

10. SETINA BIFASCIATA.

Alæ anticæ albæ, lineis longitudinalibus fasciisque duabus transversis nigris.

Lithosia bifasciata, *Rambur, Ann. Soc. Ent. Fr.* i. 270, pl. 8, f. 11.
Corsica.

11. SETINA ANDEREGGII.

Alæ posticæ innotatæ.

Setina Andereggii, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text; Suppl.* f. 45, 46.

12. SETINA AURATA.

Setina aurata, *Ménétriés.*
Caucasus.

13. SETINA MICANS.

Ex flavo albido-micans, nigro maculata; thorax maculis duabus; alæ anticæ macula basali una et maculis cæteris in series tres dispositis; posticæ serie punctorum submarginali; alæ subtus serie submarginali macularum nigrarum, anticæ nigro-pruinosæ.

Setina micans, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 15, 67.
North China.

14. SETINA FLAVA.

Flava; alæ anticæ nigro maculatæ, macula basali unica, cæteris in series tres dispositis; subtus nigro vittatæ.

Setina flava, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 15, 68.
North China.

15. Setina furcifera.

Lutea ; caput et thorax apud discos nigra ; venter nigro vittatus ; alæ anticæ vittis tribus nigris, 1a et 2a apices versus ramosis ; posticæ vitta antica nigra.

Luteous. Head and thorax with black disks. Abdomen with a black stripe beneath. Legs with black streaks. Fore wings with three black stripes; the first emitting several branches in front, the second trifurcate, the third simple. Hind wings with a black stripe in front, and with two or three black streaks at the tips. Length of the body 3½ lines; of the wings 11 lines.

a. Van Dieman's Land. Presented by R. Butler, Esq.

16. Setina Sinensis.

Testaceo-flava ; tibiæ tarsique antica fusca ; alæ anticæ guttis novem nigris trifasciatæ.

Setina flava, *var.?*

Testaceous yellow. Fore tibiæ and fore tarsi brown, which colour appears slightly on the middle tibiæ and tarsi. Fore wings with nine black dots, one near the base, two forming an oblique band before the middle, five forming a curved oblique band beyond the middle, and two forming a band near the tips. Length of the body 4—4½ lines; of the wings 9—11 lines.

a—*c*. China. Presented by G. T. Lay, Esq.
d. Shanghai, North China. From Mr. Fortune's collection.

17. Setina alterna.

Lutea ; thoracis discus niger ; alæ anticæ nigro trivittatæ, vitta 1a interrupta, 2a indentata, 3a apicali ; posticæ nigro late marginatæ.

Luteous. Palpi partly black. Proboscis testaceous. Antennæ black, luteous at the base. Disk of the thorax black. Fore legs striped with black. Fore wings with three black bands, the first interrupted, and extending along the costa to the base; the second zigzag, the third subapical. Hind wings with a broad black border which is much widened towards the tips. Length of the body 4 lines; of the wings 12 lines.

a. New Holland. Presented by J. S. Bowerbank, Esq.
b. Sydney. From Mr. Lambert's collection.

18. SETINA REJECTA.

Testacea; alæ anticæ guttis duabus anticis nigris.

Testaceous. Fore wings with two black dots near the fore border, one at a little beyond one-third of the length, the other at a little before two-thirds of the length. Length of the body 3½ lines; of the wings 9 lines.

a. ——— ?

19. SETINA APICALIS.

Testaceo-lutea; abdomen apice fuscum; tarsi apice nigri; alæ anticæ guttis duabus basalibus unaque costali nigris.

Testaceous luteous. Abdomen with a tuft of brown hairs at the base. Tarsi with black tips. Fore legs with black bands. Fore wings with two minute black dots at the base, and one near the fore border beyond half the length. Length of the body 3 lines; of the wings 7 lines.

a. China. Presented by G. T. Lay, Esq.

20. SETINA SEMIFASCIA.

Testacea; thorax fascia guttulari nigra; alæ anticæ guttis duabus nigris, una basali altera discali, fasciisque tribus obliquis macularibus fuscis.

Testaceous. Thorax with a band of four black dots. Fore wings with two black dots, one at the base, the other in the disk beyond the middle, and with three irregular oblique bands of brown dots, the first and second between the black dots, the third between the second black dot and the tip, accompanied by a zigzag brown band. Hind wings paler, with a brown hind border. Length of the body 3½ lines; of the wings 11 lines.

a. Ceylon. Presented by R. Templeton, Esq.

21. SETINA SOLITA.

Mas. *Testacea; antennæ sat dense pubescentes; alæ anticæ fasciis quatuor obliquis irregularibus guttularibus nigris.*

Male. Testaceous. Antennæ rather thickly pubescent. Fore wings with about twenty black dots which are mostly disposed in four oblique and very irregular bands; under side grayish except at the tip and along the hind border. Hind wings paler. Length of the body 3 lines; of the wings 9 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 99. EUSTIXIA.

Mas. Corpus mediocriter longum et latum. Palpi breves. Antennæ setaceæ, simplices. Abdomen alas posticas paullo superans. Pedes graciles; alæ non longæ; anticæ ad costam fere rectæ, apud marginem apicalem obliquæ, angulo postico subrotundato.

1. Eustixia pupula.

Mas. *Nigro-fusca, subtus albida; alæ albidæ; anticæ fasciis quatuor, posticæ duabus, macularibus nigris.*

Eustixia pupula (Phalæna vera, Lithosia geometriformis), *Hübn. Samml. Exot. Schmett.* ii. 24, 164, f. 327, 328.

United States.

Genus 100. EUSCEPTIS.

Fœm. Corpus breviusculum, sat validum. Palpi breves. Antennæ simplices, setaceæ. Abdomen alas posticas vix superans. Tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ, non longæ; anticæ ad costam subconvexæ, apud marginem apicalem obliquæ, postice angulatæ.

Eusceptis, *Hübn. Samml. Exot. Schmett.* ii. 21, 153.

1. Eusceptis irretita.

Albida; abdomen luteum; alæ anticæ striga media nigra antice trifurcata, postice bifurcata, fasciaque obliqua subapicali fusca, postice luteo varia; posticæ luteæ fascia discali nigra.

Eusceptis irretita (Phalæna vera, Lithosia vulgaris), *Hübn. Samml. Exot. Schmett.* ii. 21, 153, f. 305, 306.

Brazil.

Genus 101. EUBAPHE.

Mas. Corpus gracile. Palpi breves. Antennæ graciles, setaceæ, simplices, corpore paullo breviores. Abdomen alas posticas paullo superans. Pedes graciles. Alæ angustæ, sat longæ; anticæ costali subapicali, apud marginem apicalem obliquæ; posticæ rotundatæ, non angulatæ.

Eubaphe, *Hübn. Samml. Exot. Schmett.* ii. 20, 150.

1. EUBAPHE AURANTIACA.

Aurantiaca; alæ posticæ basim versus pallidiores.

Eubaphe aurantiaca (Phalæna vera, Hypocrita glaucopiformis), *Hübn. Samml. Exot. Schmett.* ii. 9, 206, f. 411, 412.

Pennsylvania.

Genus 102. SOMMERIA.

Mas. Corpus gracile, longiusculum. Palpi capitis longitudine. Antennæ subpectinatæ. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat longæ, mediocriter latæ; anticæ ad costam subconvexæ, apud margines apicales subobliquæ, angulo postico rotundato.

Sommeria, *Hübn. Samml. Exot. Schmett.* iii. 13.

1. SOMMERIA CULTA.

Fusca, viridi-albo varia; abdomen flavum, guttis nigris; alæ anticæ maculis tribus antemediis fasciaque postmedia viridi-albis fusco guttatis; posticæ flavæ, apice fuscæ.

Sommeria culta (Phalæna vera, Lithosia vulgaris), *Hübn. Samml. Exot. Schmett.* iii. 13, 217, f. 433, 434.

Africa.

Genus 103. CYDOSIA.

Corpus sat validum, non longum. Palpi breves, pubescentes; articulus 3us conicus, 2i dimidio brevior. Proboscis brevis. Antennæ graciles, setaceæ, corporis dimidio longiores. Abdomen alas

posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ, longiusculæ; anticæ ad costam vix convexæ, apud marginem apicalem vix obliquæ, angulo postico subrotundatæ.

Cydosia, *Westw. Nat. Libr.* xxxvii. *Exotic Moths*, 193.
Tinea, p., *Drury*.
Crameria, p., *Hübn.*

Has some resemblance to *Crambus* and other *Pyralides*.

Body rather stout, not long. Palpi short, pubescent; third joint conical, less than half the length of the second. Proboscis short. Antennæ slender, testaceous, bare, rather more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings narrow, rather long. Fore wings hardly convex in front, very slightly oblique along the apical border; hind angle slightly rounded; first, second and third inferior veins very near together at the base; fourth very remote from them.

1. Cydosia nobilitella.

Cyanea; caput, thorax, pedes et abdomen subtus albo maculata, hoc apice luteum; alæ anticæ fasciis alternis albis maculatis, luteisque; posticæ purpureæ, nonnunquam apud discum albæ.

Phalæna Tinea nobilitella, *Cram. Pap. Exot.* iii. 128, pl. 264, f. G.
Crameria nobilis, *Hübn. Verz. Schmett.* 168, 1735.
Cydosia nobilitella, *Westw. Nat. Libr.* pl. 24, f. 2.

West Indies.

The blue and the red and the white in the fore wings are variable in their relative proportions, and when the blue is most prominent, the hind wings are entirely blackish blue.

a, *b*. ——— ? Presented by E. Doubleday, Esq.
c, *d*. From Mr. Gosse's collection.
e. Venezuela. From Mr. Dyson's collection.
f. Parà. Presented by J. P. G. Smith, Esq.
g, *h*. Honduras. From Mr. Dyson's collection.

Genus 104. SCOTURA.

Mas. Corpus gracile, lineare, cylindricum, longissimum. Palpi pubescentes, arcuati, ascendentes, capite breviores; articulus 3us

minimus. Antennæ graciles, setaceæ, pubescentes. Abdomen alas posticas triente superans. Pedes graciles, longiusculi; tibiæ anticæ breves, latæ; posticæ calcaribus quatuor longis. Alæ sat angustæ, non elongatæ; anticæ ad costam subconvexæ, apice conicæ, postice vix angulatæ.

Male. Body slender, linear, cylindrical, very long. Palpi pubescent, curved, ascending, shorter than the head; third joint very minute. Antennæ slender, setaceous, pubescent. Abdomen extending for full one-third of its length beyond the hind wings. Legs slender, rather long; fore tibiæ short and broad; hind tibiæ with four long spurs. Wings rather narrow, of moderate length. Fore wings very slightly convex in front, somewhat conical at the tips, hardly angular behind; fourth inferior vein beginning before half the length of the wing, third beginning before two-thirds of the length.

1. SCOTURA PYRALOIDES.

Schistacea, subglauca; caput et palpi lutea; proboscis fulva; antennæ nigræ, basi luteæ.

Slate-colour, slightly glaucous. Head and palpi luteous. Proboscis tawny. Antennæ black, luteous at the base. Length of the body 6 lines; of the wings 12 lines.

a. Parà. From Mr. Bates' collection.

Genus 105. AREVA.

Mas. Corpus gracile, sublineare, longiusculum. Palpi porrecti, capite multo breviores; articulus 3us minimus, 2i quadrario non longior. Antennæ graciles, setosæ. Abdomen apice fasciculatum, alas posticas paullo superans. Pedes longi, gracillimi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longæ, angustæ; anticæ costa subconvexa; postice non angulatæ, disco subtus fasciculato.

Male. Body slender, nearly linear, rather long. Palpi porrect, much shorter than the head; third joint very small, not more than one-fourth of the length of the second. Antennæ slender, setose. Abdomen extending a little beyond the hind wings, tufted at the tip. Legs long, very slender; hind tibiæ with four spurs of moderate size. Wings long and narrow. Fore wings slightly convex in front, not angular behind, thickly tufted along the middle of the disk beneath with long hairs.

1. Areva laticilia.

Alba ; antennæ, palpi et proboscis testacea ; pedes antici fusci ; alæ anticæ postice cinerascentes ; posticæ costa longissime ciliata.

White. Antennæ, palpi and proboscis testaceous. Fore legs partly brownish. Fore wings more or less pale brownish gray towards their hind borders. Hind wings of the male fringed with very long hairs along their fore borders, their hind borders slightly tinged with gray. Length of the body 4½ lines; of the wings 14—15 lines.

a—e. Venezuela. From Mr. Dyson's collection.

Genus 106. ATTEVA.

Fœm. Corpus gracile, lineare, longiusculum. Palpi graciles, arcuati, ascendentes, capitis longitudine; articulus 3us acuminatus, 2o paullo longior. Antennæ graciles, subpubescentes, indistincte serratæ. Abdomen alas posticas plus triente superans. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus longiusculis. Alæ longæ, sat angustæ; anticæ ad costam vix convexæ, postice rotundatæ non angulatæ, venis tribus inferioribus basi approximatis.

Fem. Body slender, linear, rather long. Palpi slender, curved, ascending, as long as the head; third joint acuminated, a little longer than the second. Antennæ slender, minutely pubescent, indistinctly serrated beneath. Abdomen extending for more than one-third of its length beyond the hind wings. Legs slender; hind tibiæ with two rather long apical spurs. Wings long, rather narrow. Fore wings hardly convex along the costa, straight behind till near the tips where they are rounded and not angular, with three inferior veins which are approximate at the base. Hind wings with four inferior veins; third equidistant between the fourth and the second, which last is nearer to the first.

1. Atteva niveigutta.

Aurato-crocea ; thorax et alæ anticæ albo guttata.

Gilded saffron-colour. Head white about the eyes. Palpi and antennæ brown. Proboscis tawny. Thorax with white dots. Tarsi and fore tibiæ brownish. Fore wings above with five stripes of white

dots which vary slightly in size. Length of the body 5½ lines; of the wings 14 lines.

a. Silhet. From Mr. Stainforth's collection.

Genus 107. MIEZA.

Corpus gracile, breviusculum. Palpi recti, graciles, capite paullo breviores; articulus 3us linearis, apice conicus, 2o paullo brevior. Antennæ graciles, setaceæ, subpubescentes. Abdomen alas posticas non aut vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longæ, angustæ; anticæ ad costam subconvexæ, apice conicæ, angulo postico rotundato, venis tribus inferioribus basi approximatis.

Eustixis? *Hübn. Samml. Exot. Schmett.*

Body slender, rather short. Palpi straight, slender, a little shorter than the head; third joint linear, conical at the tip, a little shorter than the second. Antennæ slender, setaceous, very minutely pubescent. Abdomen extending as far as or a little beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings long, narrow. Fore wings very slightly convex in front, conical at the tips, with a somewhat rounded angle behind; the three inferior veins approximate at the base. Hind wings with four inferior veins; third approximate at the base, fourth remote.

1. Mieza igninix.

Pallide rufa aut crocea; caput supra album, vertice rufa; palpi apice nigri; antennæ nigræ; thorax albus, nigro sexmaculatus; alæ anticæ supra albæ, strigis costalibus et apicalibus maculisque quinque discalibus nigris.

Pale red or saffron-colour. Head white above, pale red on the vertex. Palpi with black tips. Antennæ black. Thorax white, with six black spots, one on the disk, two on each side, and one on the scutellum. Fore tibiæ and fore tarsi brown. Fore wings above white with black streaks on one-third of the breadth from the costa and on one-third of the length from the tips; in the rest of the wing there are five elongated black spots, two before the middle and three beyond the middle. Length of the body 3—3½ lines; of the wings 10—11 lines.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.
b—d. United States. Presented by E. Doubleday, Esq.

2. MIEZA SUBFERVENS.

Pallide rufa aut crocea; caput thoraxque supra et antennæ basi alba; alæ anticæ supra albæ, punctis plurimis guttisque nonnullis fuscis.

Male. Pale red or saffron-colour. Head and thorax white above. Antennæ white towards the base. Fore wings white above with many elongate brown points, and with two oblique bands of brown dots, one at one-fourth of the length, the other before two-thirds of the length. Length of the body 3 lines; of the wings 10 lines.

a, *b*. United States. Presented by E. Doubleday, Esq.

3. MIEZA? PUPULA.

Aurantiaca; thorax albus; alæ anticæ supra nigro notatæ, pallide virides, apices versus subroseæ.

Eustixis pupula (Phalæna vera, Lithosia geometriformis), *Hübn. Samml. Exot. Schmett.* iii. 24, 245, f. 489, 490.

Georgia.

Genus 108. CYANA.

Mas. Corpus sublineare, mediocriter longum et gracile. Palpi validiusculi capite breviores; articulus 3us linearis, apice conicus, 2i dimidio brevior. Antennæ graciles, simplices, setaceæ. Abdomen alas posticas non superans. Pedes sat robusti; tibiæ anticæ subdilatatæ; posticæ calcaribus quatuor sat longis. Alæ latiusculæ, non longæ; anticæ ad costam et apice subconvexæ, angulo postico subrotundato.

Male. Body nearly linear, moderately long and slender. Palpi moderately stout, shorter than the head; third joint linear, conical at the tip, less than half the length of the second. Antennæ slender, simple, setaceous. Abdomen not extending beyond the hind wings. Legs rather stout; fore tibiæ slightly dilated; hind tibiæ with four rather long spurs. Wings rather broad, not long. Fore wings slightly convex in front and at the tips, with a somewhat rounded angle behind; first inferior vein at some little distance from the second and the third which are contiguous at the base; fourth remote from the third.

1. CYANA DETRITA.

Alba; palpi et antennæ fusca; tibiæ tarsique anteriora fusco fasciata; alæ anticæ fasciis quinque pallide fuscis guttisque tribus obscurioribus, subtus fuscæ apice albæ.

White. Palpi and antennæ brown. Proboscis tawny. Anterior tibiæ and tarsi with brown bands. Fore wings with five irregular and diffuse pale brown bands, and three dark brown dots at the middle of the length and nearer to the fore border than to the hind border; under side brown with white tips. Length of the body 5 lines; of the wings 15 lines.

a. Silhet. From Mr. Argent's collection.

Genus 109. DOLICHE.

Mas et Fœm. Corpus mediocriter longum et validum. Palpi recti, porrecti, capite breviores; articulus 3us apice conicus, 2i dimidio brevior. Antennæ setaceæ, subpubescentes. Abdomen alas posticas attingens. Pedes sat graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat angustæ, non longæ; anticæ ad costam rectæ, apice subobtusæ, postice rotundatæ non angulatæ, vena 4a inferiore remota.

Male and Female. Body moderately long and stout. Palpi straight, porrect, shorter than the head; third joint conical at the tip, less than half the length of the second. Antennæ setaceous, minutely pubescent. Abdomen extending as far as the hind wings. Legs rather slender; hind tibiæ with four moderately long spurs. Wings rather narrow, not long. Fore wings not convex in front, somewhat obtuse at the tips, rounded and not angular behind; fourth inferior vein remote from the rest.

1. DOLICHE GELIDA.

Alba; palpi et antennæ testacea; thorax testaceo bifasciatus; abdomen apice roseum; tarsi testacei; alæ anticæ apice rufæ, fasciisque duabus antica fusca postica testaceo biramosa; posticæ roseæ.

White. Palpi, proboscis and antennæ testaceous. Thorax with two slight testaceous bands. Abdomen rosy towards the tip. Tarsi testaceous. Fore wings with red tips, and in front of the disk

with a brown stripe which is dilated and interrupted towards the base; there is also a large oblong-quadrate testaceous mark by the middle hind border, occupying nearly half the breadth of the wing, and emitting a band at each end to the fore border; under side brown in front, white behind and with a tuft beyond the middle of the costa. Hind wings rosy. Length of the body 4—4½ lines; of the wings 12—13 lines.

Var. β. Brown and testaceous stripes of the fore wings imperfect and interrupted.

a, *b*. Silhet. From the Rev. J. Stainforth's collection.

2. Doliche hilaris.

Alba; caput fusco uniguttatum; palpi et antennæ testacea; thorax e maculis fuscis fasciatus; pedes anteriores fusco fasciati; alæ anticæ maculis nonnullis fasciisque quatuor angulosis et indeterminatis fuscis, guttisque duabus obscurioribus.

White. Head with a pale brown dot between the eyes. Palpi, proboscis and antennæ testaceous. Palpi white beneath. Thorax with three bands of pale brown dots. Fore and middle legs with brown bands. Fore wings with pale brown spots at the base and at the tips, and with four irregular very crooked and zigzag pale brown bands; the first and second bands united in the middle; third and fourth much more angular than the first and second; two dark brown dots, one by the base, and one in the disk a little beyond the middle and rather nearer to the fore border than to the hind border; these bands are indistinct beneath. Length of the body 3—3¼ lines; of the wings 9—10 lines.

a, *b*. Ceylon. Presented by R. Templeton, Esq.

3. Doliche frigida.

Alba; palpi et antennæ testacea; thorax fascia media fusca; alæ anticæ discis fuscis basi albo maculatis apice albo guttatis; posticæ maculis indistinctis apicalibus pallide fuscis.

White. Palpi, proboscis and antennæ testaceous. Thorax with a brown middle band. Fore wings with brown disks which contain white dots towards the tips and white confluent spots towards the base; a row of pale brown spots along the tips. Hind wings with pale brown spots at the tips. Length of the body 3 lines; of the wings 9 lines.

a. East Indies. From Archdeacon Clerk's collection.

Genus 110. EUTANE.

Mas. Corpus sat gracile, non longum. Palpi capite valde breviores; articulus 3us minimus. Antennæ graciles, setaceæ, corporis dimidio vix longiores, setis paucis instructæ. Abdomen alas posticas non superans. Pedes mediocriter validi, calcaribus quatuor sat longis. Alæ latiusculæ, non longæ. Alæ anticæ ad costam vix convexæ, apice subconicæ, postice subrotundato-angulatæ.

Male. Body rather slender, not long. Palpi very much shorter than the head; third joint very small. Antennæ slender, setaceous, little more than half the length of the body, very thinly beset beneath with short bristles. Abdomen not extending beyond the hind wings. Legs moderately stout; hind tibiæ with four rather long spurs. Wings moderately broad, not long. Fore wings hardly convex in front, somewhat conical at the tips, with the hind angle slightly rounded.

1. EUTANE TERMINALIS.

Nigra; caput antice, prothorax, humeri, et abdomen apice lutea; alæ anticæ fasciis quatuor luteis, 2a 4aque interruptis; posticæ luteæ, nigro late marginatæ.

Black. Head luteous in front. Proboscis piceous. Thorax luteous in front, and with a luteous spot on each shoulder. Abdomen luteous at the tip. Anterior legs mostly black; hind legs mostly luteous. Fore wings with four slightly oblique luteous bands, the second and the fourth interrupted, or each consisting of two spots, the fourth or apical one with the fore spot subdivided. Hind wings luteous with a broad black border. Length of the body 3—4 lines; of the wings 10—12 lines.

a. New Holland. Presented by Major-General Hardwicke.
b, c. New Holland. Presented by J. Hunter, Esq.
d. New South Wales. From Mr. Wood's collection.
e. ——— ?

Genus 111. PITANE.

Mas. Corpus lineare, mediocriter longum et validum. Palpi pilosi, brevissimi; articulus 3us minimus. Antennæ mediocriter pectinatæ, corporis dimidio vix longiores Abdomen alas posticas non superans. Pedes validiusculi; tibiæ posticæ calcaribus quatuor

longis. Alæ mediocriter latæ, non longæ; anticæ costa recta, margine apicali subobliquo, angulo postico rotundato.

Male. Body linear, moderately long and stout. Palpi pilose, very short; third joint very small. Antennæ moderately deeply pectinated, little more than half the length of the body. Abdomen not extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad, not long; fore wings straight along the costa, slightly oblique at the tips; hind angle somewhat rounded.

1. Pitane Lydia.

Prothorax et anus lutei; alæ concolores, nigro-fuscæ; anticæ basi fasciisque tribus luteis; posticæ basi late luteæ.

Lithosia Lydia, *Donov. Epit. Ins. New Holl. Pl. Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 211, 5.

New Holland.

Var. ? *Lutea; antennæ nigræ; thorax nigro sexmaculatus; abdomen vitta dorsali nigra; alæ anticæ nigræ, basi fasciisque luteis; posticæ nigro marginatæ.*

Var. ? Luteous. Antennæ black, luteous at the base. Thorax with six black spots, two on each side, and one on each side of the base. Abdomen with a black dorsal stripe. Fore wings black, luteous at the base, and with five luteous bands which are irregular and vary in breadth, and are more or less interrupted, the third contains a black dot. Hind wings luteous, with a broad black hind border which sometimes contains a luteous mark in the middle. Length of the body 3 lines; of the wings 9 lines.

a, b. Bengal. From M. Becker's collection.
c. North India. From Mr. Stevens' collection.

2. Pitane dilecta.

Nigro-fusca, luteo-hirta; antennæ fusco-ferrugineæ; tibiæ et tarsi lutea, fusco fasciata; alæ purpureo-cupreo suffusæ; anticæ punctis maculisque luteis; posticæ vitta discali guttisque marginalibus luteis.

Brownish black. Antennæ ferruginous brown. Thorax on each side and abdomen with luteous hairs. Tibiæ and tarsi pale

luteous with brown bands. Wings with a purplish cupreous tinge. Fore wings thickly covered with luteous points, and adorned with a row of subquadrate luteous spots along the costa, and with two luteous dots at the tips. Hind wings with a broad luteous stripe which widens from the base to beyond the middle, with a luteous spot at each tip, and with luteous dots along the fore border and the inner border; fringe pale luteous. Length of the body 3 lines; of the wings 8 lines.

a. New Holland. Presented by Major-General Hardwicke.

3. Pitane conferta.

Lutea; antennæ nigræ, maris *sat late pectinatæ; abdomen* maris *supra nigricans; alæ anticæ nigricantes, fasciis quinque obliquis submacularibus luteis; posticæ dimidio apicali nigricantes.*

Luteous. Palpi of the male mostly black beneath. Antennæ black, luteous at the base, rather deeply pectinated in the male; branches curled, decreasing in length towards the tips. Thorax with black dots. Abdomen of the male blackish above. Coxæ and tips of the tibiæ and of the tarsi black. Fore wings blackish, with five oblique luteous bands; the first, second and fifth more or less interrupted, the third and fourth zigzag. Hind wings black for nearly half the length from the tips, including some apical luteous spots beneath in the male and on both sides in the female. Length of the body 3—4 lines; of the wings 11—14 lines.

a, *b*. Ceylon. Presented by R. Templeton, Esq.

4. Pitane? mediastina.

Mas. *Nigra; thoracis discus et abdomen apice lutea; alæ anticæ fascia clavata postmedia fasciisque septem albis; posticæ luteæ fascia marginibusque nigris.*

Dysauxes mediastina (Phalæna vera, Hypocrita sphingiformis), *Hübn. Samml. Exot. Schmett.* iii. 27, 253, f. 505, 506.

Georgia.

Genus 112. CISTHENE.

Mas. Corpus sat breve, mediocriter validum. Palpi capite multo breviores; articulus 3us conicus, acuminatus, 2i dimidio

brevior. Antennæ robustæ, setosæ, setaceæ, corporis dimidio paullo longiores. Abdomen alarum margines posticos non attingens, apice forcipatum. Pedes validiusculi; tibiæ posticæ calcaribus quatuor sat longis. Alæ mediocriter latæ, non longæ; anticæ ad costam vix convexæ, apice obliquæ, postice rotundatæ non angulatæ.

Male. Body rather short, moderately stout. Palpi much shorter than the head; third joint conical, acuminated, less than half the length of the second. Antennæ stout, setose, setaceous, rather more than half the length of the body. Abdomen not extending so far as the hind wings; tip forcipated. Legs moderately stout; hind tibiæ with four rather long spurs. Wings moderately broad, not long. Fore wings very slightly convex in front, oblique at the tips, rounded and not angular behind; third inferior vein full thrice further from the second than the second from the first; fourth nearly thrice further from the third than the third from the second.

1. Cisthene trisigna.

Lutea; caput macula nigra; palpi apice nigri; antennæ nigræ; alæ anticæ fuscæ, luteo trinotatæ; posticæ nigro late marginatæ.

Luteous. Head with a black spot on the vertex. Palpi with black tips. Antennæ black. Legs partly brownish. Fore wings dark brown, with three luteous marks, the first a short stripe at the base, the second an oval spot in the disk, the third a curved clavate band by the tip. Hind wings with broad black bands. Length of the body 2¾ lines; of the wings 9 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.

2. Cisthene subjecta.

Rosea; caput et thoracis discus nigra; pedes fusco-albidi; alæ anticæ æneo-cinereæ, striga antica vittaque postica roseis; posticæ apices versus æneo-cinereæ.

Rose-colour. Head black, rosy about the eyes. Palpi and antennæ black. Proboscis testaceous. Thorax with a black disk. Legs mostly whitish, partly brown. Fore wings æneous gray, with a fusiform rosy streak beyond the middle of the costa, and with a rosy discal stripe along more than half the length from the base, dilated and joining the hind border at each end. Apical third part of the hind wings æneous gray. Length of the body 2¼—2½ lines; of the wings 7—8 lines.

Var. β. Costal streak of the fore wings wanting, discal stripe appearing only at its tip.

Var. γ. Like *Var. β.* Discal stripe of the fore wings replaced by a slender streak, which extends along the hind border and is slightly dilated at the tip.

a—e. United States. Presented by E. Doubleday, Esq.

Genus 113. CROCOTA.

Mas et Fœm. Corpus mediocriter validum, non longum. Palpi robusti, porrecti, pubescentes, capitis longitudine; articulus 3us gracilis, acuminatus, 2i dimidio brevior. Antennæ setaceæ, subsetosæ, sat validæ, corporis dimidio non aut vix longiores. Abdomen alarum margines posticos non attingens. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ, non longæ; anticæ ad costam vix convexæ, apicibus subangulatæ, marginibus apicalibus obliquæ, postice vix angulatæ.

Crocota, *Hübn. Samml. Exot. Schmett.*

Male and Female. Body moderately stout, not long. Palpi stout, porrect, pubescent, as long as the head; third joint slender, acuminated, not half the length of the second. Antennæ setaceous, slightly setose, rather stout, hardly or not more than half the length of the body. Abdomen not extending so far as the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad, not long. Fore wings very slightly convex in front, slightly angular at the tips, oblique along the apical border, indistinctly angular behind; first, second and third inferior veins approximate at the base; fourth remote from the third.

1. Crocota ferruginosa.

Ferruginea; abdomen guttis dorsalibus nigris; alæ posticæ gutta discali maculisque tribus marginalibus nigricantibus.

Ferruginous, paler beneath. Abdomen pale ferruginous, with a row of dorsal black dots. Hind wings pale ferruginous, with a blackish dot in the disk, and two or three blackish spots along the border. Length of the body 3½—4 lines; of the wings 10—11 lines.

a—c. St. Martin's Falls, Albany River, Hudson's Bay. "Caterpillar with fine brown hairs," *MSS.* Presented by Dr. Barnston.

2. Crocota cuprearia.

Testacea; alæ subhyalinæ, apices versus subcupreæ.

Testaceous. Fore legs mostly brown. Wings slightly rosy testaceous, subhyaline, with a slight cupreous tinge towards the tips. Length of the body 3—4 lines; of the wings 9—11 lines.

a, *b*. ———? Presented by W. F. Evans, Esq.
c, *d*. Brazil. Presented by E. Doubleday, Esq.
e. Jamaica? Presented by E. Doubleday, Esq.
f. Venezuela. From Mr. Dyson's collection.

3. Crocota brevicornis.

Cervina aut luteo-cervina; antennæ nigræ; abdomen roseum; alæ posticæ roseæ, nonnunquam vitta marginali interrupta guttaque discali fuscis.

Fawn-colour, or luteous fawn-colour. Antennæ black, short. Abdomen rose-colour. Fore wings rosy beneath. Hind wings rose-colour, with an indistinct and sometimes quite obsolete brown stripe on the hind border, and a brown dot in the disk. Length of the body 2½—3½ lines; of the wings 8—10 lines.

a—*f*. United States. From Mr. Milne's collection.
g. ———?
h. ———?

4. Crocota rubicundaria.

Fulva; alæ nonnunquam macula discali fusca; posticæ rufæ, nigro marginatæ.

Crocota rubicundaria (Geometra ampla, Eutrapela crepera), *Hübn. Samml. Exot. Schmett.* iii. 28, 256, f. 511, 512.

Georgia.

Var. α. Fore wings tawny, with a slight brown dot in the disk. Hind wings red with a black discal spot and a broad black hind border.

Var. β. Hind wings partly red on the hind border.

Var. γ. Fore wings and hind wings without discal spots.

a. Massachusetts. From Prof. Sheppard's collection.
b—*e*. ———?

5. CROCOTA LÆTA.

Nigro-cinerea; abdomen rufum, vitta nigra; alæ anticæ ad costam rufæ; posticæ rufæ; margine lato nigro-cinereo.

Lithosia læta, *Boisd. Guér. Icon. Règne Anim. Ins.* pl. 88, f. 6. *Texte*, 519.

Grayish black. Proboscis testaceous. Abdomen red with a black stripe which is broader beneath than above. Fore wings red along the costa. Hind wings red with a broad grayish black border. Length of the body 3 lines; of the wings 9 lines.

a ——— ?

Genus 114. DELPHYRE.

Fœm. Corpus lineare, breve, validum. Palpi ascendentes, vix arcuati, capitis longitudine; articulus 3us gracilis, acuminatus, 2i quadrario brevior. Antennæ robustæ, serratæ, pubescentes, corporis dimidio paullo longiores. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ angustæ, non longæ; anticæ ad costam vix convexæ, apice conicæ, postice rotundatæ non angulatæ.

Female. Body linear, short, stout. Palpi ascending, very slightly curved, as long as the head; third joint slender, acuminated, not one-fourth of the length of the second. Antennæ stout, serrated, pubescent, a little more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs slender; hind tibiæ with two minute apical spurs. Wings narrow, not long. Fore wings indistinctly convex in front, conical at the tips, rounded and not angular behind; fourth inferior vein remote from the rest.

1. DELPHYRE HEBES.

Pallide cervina; alæ posticæ nigricantes, antice pallide testaceæ.

Pale fawn-colour. Hind wings blackish, pale testaceous along the fore border. Length of the body 3 lines; of the wings 9 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 115. TRICHROMIA.

Corpus gracile, longiusculum. Palpi breves. Antennæ setaceæ, simplices, graciles. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ, vix elongatæ; anticæ ad costam subconvexæ, apud marginem apicalem subobliquæ, angulo postico rotundato.

Trichromia, *Hübn. Verz. Schmett.* 164.

1. TRICHROMIA TRIGEMMIS.

Obscure fusca; alæ anticæ fascia media bimaculari maculaque apicali postica flavis; posticæ albæ, margine postico et plus triente apicali cinereis.

Trichromia trigemmis (Phalæna vera, Lithosia tineiformis), *Hübn. Samml. Exot. Schmett.* iii. 22, 239, f. 477, 478.

St. Domingo.

Genus 116. CINCIA.

Fœm. Corpus breve, robustum, lineare. Palpi recti, capite multo breviores; articulus 3us linearis, apice conicus, 2o multo brevior. Antennæ graciles, serratæ, pubescentes, corporis dimidio paullo longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latiusculæ, non longæ; anticæ costa subconvexa, margine apicali obliqua, postice angulatæ.

Female. Body short, stout, linear. Palpi straight, much shorter than the head; third joint linear, conical at the tip, much shorter than the second. Antennæ slender, serrated, pubescent, a little more than half the length of the body. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four moderately long spurs. Wings rather broad, not long. Fore wings slightly convex in front, oblique along the apical border, angular behind; first, second, and third inferior veins approximate at the base; fourth remote from the third.

1. CINCIA CONSPERSA.

Albida aut cana; palpi apice nigricantes; thorax nigro guttatus; pedes antici et intermedii nigro fasciati; alæ anticæ nigro punctatæ et guttatæ, subtus posticæque omnino nigricantes.

Whitish or hoary. Palpi blackish towards their tips. Proboscis testaceous. Thorax with black dots. Anterior tibiæ with black bands. Fore wings sprinkled with black points and with full twenty-four black dots of which there is a row across each tip; under side and hind wings blackish. Length of the body 3 lines; of the wings 9 lines.

a. Jamaica. From Mr. Gosse's collection.
b. Jamaica. Presented by E. Doubleday, Esq.

Genus 117. SICCIA.

Mas. Corpus lineare, validiusculum, breviusculum. Palpi recti, graciles, pubescentes, capite multo breviores; articulus 3us acuminatus, 2i dimidio brevior. Antennæ graciles, simplices, setaceæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, non longæ; anticæ costa vix convexa, margine apicali obliqua, angulo postico rotundato.

Male. Body linear, rather stout and short. Palpi straight, slender, pubescent, much shorter than the head; third joint acuminated, less than half the length of the second. Antennæ slender, simple, setaceous. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad, not long. Fore wings hardly convex in front, oblique along the apical border; hind angle rounded; first and second inferior veins near together at the base; third further from the second than the second from the first; fourth full four times further from the third than the third from the second.

1. Siccia Caffra.

Albida; palpi testacei, apice fusci; thorax nigro biguttatus; alæ anticæ e guttis nigris tredecimquinque fasciatæ.

Whitish. Palpi testaceous, brown towards their tips. Proboscis testaceous. Thorax with a black dot on each side of the disk. Fore wings with thirteen black dots which are disposed in five oblique bands; there is also occasionally a very oblique and zigzag black streak near the hind border and towards the tip. Length of the body 2¾ lines; of the wings 8 lines.

a. South Africa. From Mr. Argent's collection.
b. South Africa. From M. Becker's collection.

2. Siccia rivulosa.

Testacea; alæ anticæ fasciis tribus angulosis intermediis guttisque basalibus et apicalibus fuscis.

Testaceous. Fore tibiæ brown at the tips. Fore wings with pale brown dots at the base and at the tips, the intermediate part being occupied by two or three very undulating or zigzag pale brown bands. Length of the body 3 lines: of the wings 9 lines.

a. Caffraria. From M. Becker's collection.

Genus 118. HALONE.

Mas. Corpus gracile, longiusculum. Palpi vix arcuati, corpore valde breviores; articulus 3us parvus, acuminatus, 2i quadrario non longior. Antennæ setaceæ, pilosæ, corporis dimidio non longiores. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ, non longæ; anticæ costa subconvexa, margine apiculi convexo, angulo postico subrotundato.

Male. Body slender, rather long. Palpi very slightly curved, much shorter than the head; third joint small, acuminated, not more than one-fourth of the length of the second. Antennæ setaceous, pilose, about half the length of the body. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings rather broad, not long. Fore wings slightly convex in front, oblique along the apical border; hind angle somewhat rounded; fourth inferior vein about twice further from the third than the third from the second.

1. Halone sobria.

Cinereo-fusca; palpi nigri; abdomen fulvum, apice flavum; pedes postici flavi; alæ anticæ fasciis angulosis fuscis obscurioribus et cinereis; posticæ luteæ apice fuscæ.

Brown, sprinkled with cinereous hairs. Palpi black. Proboscis testaceous. Antennæ brown. Abdomen tawny, yellow at the tip. Legs brown; hind legs yellow. Fore wings brown, varied with darker brown and cinereous irregular and zigzag bands; under side brown with luteous borders. Hind wings luteous with brown tips. Length of the body 3½ lines; of the wings 11 lines.

a, *b*. Port Natal. From M. Becker's collection.

Genus 119. LYSCEIA.

Mas. Corpus gracile, non longum. Palpi validi, capite valde, breviores; articulus 3us conicus, minimus. Antennæ submoniliformes, setaceæ, pubescentes, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ, non longæ; anticæ costa recta, apice fere conica, postice rotundatæ non angulatæ.

Male. Body slender, not long. Palpi stout, very much shorter than the head; third joint conical, very small. Antennæ submoniliform, setaceous, pubescent, more than half the length of the body. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings rather narrow, not long. Fore wings straight in front, nearly conical towards the tips, rounded and not angular behind; fourth inferior vein rather further from the third than the third from the second.

1. Lysceia biguttata.

Pallide cinerea; caput luteum; abdomen albidum, apice testaceum; pedes fusci, femoribus testaceis; alæ anticæ guttis duabus discalibus nigris; posticæ albido-testaceæ.

Pale gray. Head, palpi and proboscis luteous. Abdomen whitish, testaceous at the tip. Legs brown; femora testaceous. Fore wings with two black dots which are placed in an upright transverse line a little beyond the middle of the disk. Hind wings whitish testaceous. Length of the body 3 lines; of the wings 9 lines.

a, *b*. South Africa. Presented by Dr. A. Smith.

Genus 120. ÆMENE.

Mas. Corpus mediocriter validum et longum. Palpi graciles, vix arcuati, capite multo breviores; articulus 3us linearis, 2o paullo brevior et gracilior. Antennæ setaceæ, mediocriter pectinatæ, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, non longæ; anticæ costa vix convexa, margine apicali obliquo, angulo postico subrotundato.

Male. Body moderately stout and long. Palpi slender, very slightly curved, much shorter than the head; third joint linear, a

little shorter and more slender than the second. Antennæ setaceous, moderately deeply pectinated, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad, not long. Fore wings very slightly convex in front, oblique along the apical border; hind angle slightly rounded; first and second inferior veins contiguous at the base; fourth about four times further from the third than the third is from the second.

1. Æmene Taprobanis.

Albida; palpi testacei, apice nigri; antennæ testaceæ; tibiæ tarsique antica nigra, albido fasciata; alæ anticæ guttis paucis nigris.

Whitish. Palpi testaceous, black towards their tips. Proboscis and antennæ testaceous. Fore tibiæ and fore tarsi black, with whitish bands. Fore wings with a few black dots which extend along the costa and along the disk and across the tips. Length of the body 3—3½ lines; of the wings 7—9 lines.

a, b. Ceylon. From the Rev. J. Wenham's collection.

Genus 121. PALLENE.

Mas. Corpus gracile, mediocriter longum. Palpi recti, capite valde breviores; articulus 3us linearis, apice conicus, 2o brevior et gracilior. Antennæ setaceæ, pubescentes, corporis dimidio longiores. Abdomen alarum margines posticos fere attingens. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ, non longæ; anticæ costa subconvexa, margine apicali vix obliquo, angulo postico rotundato.

Male. Body slender, moderately long. Palpi straight, much shorter than the head; third joint linear, conical at the tip, shorter and more slender than the second. Antennæ pubescent, setaceous, more than half the length of the body. Abdomen not extending quite so far as the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad, not long, like those of the *Tortricidæ*. Fore wings slightly convex in front, very slightly oblique along the apical border; hind angle rounded; third inferior vein at the base much nearer to the second than to the fourth.

1. Pallene structa.

Lutea; alæ anticæ fusco trifasciatæ et apud apices subnebulosæ; posticæ fusco marginatæ.

Luteous. Antennæ black, luteous at the base. Fore wings with three angular indented brown bands; first indistinct and interrupted; second before the middle; third beyond the middle; the wings are also slightly streaked or clouded with brown which increases from the first band to the tips; under side wholly luteous except a broad brown border. Hind wings with broad brown borders. Length of the body 3 lines; of the wings 7½ lines.

a—e. Sydney. From Mr. Lambert's collection.

2. Pallene jucunda.

Lutea; thorax fascia lata nigra; abdomen supra nigricans; alæ anticæ basi fasciisque duabus latis nigris; posticæ nigro late marginatæ.

Luteous. Thorax with a broad black band. Abdomen blackish above. Fore wings black at the base and with two black bands, one before the middle, the other beyond two-thirds of the length. Hind wings with broad black borders. Length of the body 2¼ lines; of the wings 7 lines.

a, b. Sydney. From Mr. Lambert's collection.

Genus 122. CYLLENE.

Mas. Corpus breviusculum, validiusculum. Palpi capite valde breviores; articulus 3us parvus, conicus. Antennæ setaceæ, graciles, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longiusculis. Alæ breviusculæ, mediocriter latæ; anticæ costa subconvexa, margine apicali obliqua.

Male. Body rather short and stout. Palpi very much shorter shorter than the head; third joint small, conical. Antennæ setaceous, slender, more than half the length of the body. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four rather long spurs. Wings moderately broad, rather short, somewhat like those of the *Tortricidæ*. Fore wings slightly convex in front, oblique along the apical border; third inferior vein more than twice further from the fourth than from the second.

Div. I.

Alæ anticæ postice rotundatæ, non angulatæ.

Fore wings rounded and not angular behind.

1. CYLLENE HUMILIS.

Testacea; pedes antici fusco varii; alæ anticæ gutta basali nigra fasciisque duabus obliquis fuscis; posticæ maculis posticis indistinctis pallide fuscis.

Testaceous. Fore legs partly brown. Fore wings with a black dot on each at the base, near which there is a very oblique brown band, and beyond the middle there is a second brown band which is oblique, irregular, and very broad, and has a minute dot by its inner side. Hind wings pale testaceous, with indistinct pale brown spots along the hind border. Length of the body 2½ lines; of the wings 8 lines.

a. East Indies. From Archdeacon Clerk's collection.

Div. 2.

Alæ anticæ postice angulatæ.

Fore wings angular behind.

2. CYLLENE TRANSVERSA.

Albida; palpi testacei; thoraxdisco maculisque duabus fuscis; alæ anticæ fusco trifasciatæ.

Whitish. Palpi, proboscis and antennæ testaceous. Thorax with a brown disk, and a brown spot on each side. Fore wings with two nearly upright slightly undulating brown bands, the first at one-third of the length, the second beyond two-thirds of the length. Hind wings white. Length of the body 2½ lines; of the wings 8 lines.

a. Ceylon. Presented by R. Templeton, Esq.

3. Cyllene undulosa.

Albida; palpi et antennæ testacea; thorax nigro guttatus; alæ anticæ nigro trivittatæ, lasi apiceque nigro guttatæ.

Whitish. Palpi, proboscis and antennæ testaceous. Thorax with black dots on each side. Fore legs mostly black. Fore wings with a black slender straight nearly upright band a little before the middle, between it and the base there are black dots and a curved interrupted black band, and beyond it there are also black dots and a very zigzag black band. Length of the body 2½ lines; of the wings 7 lines.

a. East Indies. From Archdeacon Clerk's collection.

Genus 123. ISINE.

Fœm. Corpus sublineare, mediocriter longum et robustum. Palpi graciles, capite valde breviores; articulus 3us acuminatus, 2i dimidio brevior. Antennæ graciles, setaceæ, subsetosæ, corporis dimidio non longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, non longæ; anticæ costa vix convexa, margine apicali obliquo, angulo postico rotundato.

Female. Body nearly linear, of moderate length and thickness. Palpi slender, very much shorter than the head; third joint pointed, less than half the length of the second. Antennæ slender, setaceous, thinly beset with short bristles, not more than half the length of the body. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad, not long. Fore wings very slightly convex in front, oblique along the apical border; hind angle rounded; first, second and third inferior veins approximate at the base; fourth very remote from the third.

1. Isine trigutta.

Albi; palpi et pedes antici testacei; alæ anticæ guttis tribus discalibus nigris punctisque tribus rufescentibus.

White. Palpi and fore legs testaceous. Fore wings with three black dots in a stripe near the fore border from the base to the tip

of the wing, one by the base, one before, and the third beyond the middle of the length; three little reddish marks in a band at the tips. Length of the body 3 lines; of the wings 9 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 124. BARSINE.

Mas. Corpus longiusculum, sat gracile. Palpi capite multo breviores; articulus 3us conicus, 2i dimidio brevior. Antennæ setaceæ, subpectinatæ, ramis gracillimis. Abdomen apice valde pilosum. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latiusculæ, non longæ; anticæ costa subconvexa, margine apicali valde obliquo, angulo postico rotundato.

Male. Body rather long and slender. Palpi much shorter than the head; third joint conical, less than half the length of the second. Antennæ setaceous, minutely pectinated; the branches very slender and like bristles. Abdomen tapering very slightly from the base to the tip which is very pilose. Legs slender; hind tibiæ with four moderately long spurs. Wings rather broad, not long. Fore wings slightly convex in front, very oblique along the apical border; hind angle rounded; first second and third inferior veins approximate at the base; third about four times further from the fourth than from the second.

1. BARSINE DEFECTA.

Testacea; palpi apice nigri; thorax nigro quadriguttatus; alæ anticæ e strigis rufis fuscisque fasciatæ.

Testaceous. Palpi with black tips. Thorax with two black dots on each side. Fore wings with four irregular oblique bands of red streaks, the streaks lengthening successively in each band, those on the fourth band twice the length of those on the first; there are also two oblique bands of brown dots and an apical one of brown streaks. Length of the body 5½ lines; of the wings 14 lines.

a, *b*. Nepaul. Presented by Major-General Hardwicke.

2. BARSINE EFFRACTA.

Alba; thorax fascia rufa; alæ anticæ rufo maculatæ et bifasciatæ.

White. Palpi, proboscis and antennæ testaceous. Thorax with a red band. Legs testaceous with white tomentum. Fore

wings with several red spots, some of which form two irregular and nearly interrupted bands. Length of the body 4 lines; of the wings 11 lines.

a. Nepaul. Presented by Major-General Hardwicke.

Genus 125. SESAPA.

Mas et Fœm. Corpus gracile, non longum. Palpi capite breviores; articulus 3us acuminatus, 2o brevior. Antennæ graciles, setaceæ, subsetosæ. Abdomen alas posticas non superans, *maris* apice forcipatum. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocribus. Alæ latiusculæ, non longæ; anticæ ad costam convexæ, apice conicæ, margine postico rotundato non angulato.

Male and Female. Body slender, not long. Palpi shorter than the head; third joint acuminated, shorter than the second. Antennæ slender, setaceous, minutely setose. Abdomen not extending beyond the hind wings, forcipated at the tip in the male. Legs slender; hind tibiæ with four spurs of moderate length. Wings rather broad, not long. Fore wings convex in front, conical at the tips; hind border rounded, not angular; third inferior vein near to the second at the base; fourth remote from the third.

1. Sesapa inscripta.

Mas. *Rosea; palpi et pedes nigri; abdomen supra nigricans, apice testaceum; alæ anticæ fasciis tribus nigris, 1a recta, 2a angulosa, 3a guttulari; posticæ margine lata nigra apicali.* Fœm. *Alba; thorax roseo maculatus; alæ anticæ fasciis tribus nigris, marginibus roseis, subtus omnino roseæ; posticæ subroseæ.*

Male. Bright rose-colour. Palpi black. Proboscis testaceous. Antennæ brown. Abdomen mostly black above, testaceous at the tip. Legs black. Fore wings with a slender black band a little before the middle; beyond this there is an extremely zigzag black band, and beyond the latter a curved band of black dots; fringe black; under side with a black subapical band. Hind wings with a broad black apical border. *Female.* White. Thorax with rosy spots. Abdomen mostly black. Fore wings rosy beneath and with rose-coloured borders above, and with black marks like those of the male, but more irregular. Hind wings with a slight rosy tinge. Length of the body 2½—3½ lines; of the wings 7—10 lines.

a, *b*. North China. From Mr. Fortune's collection.

Genus 126. BIZONE.

Mas et Fœm. Corpus validiusculum, longitudine mediocri. Palpi pilosi, subarcuati, capite multo breviores; articulus 3us conicus, 2i dimidio brevior. Antennæ graciles, setaceæ, pubescentes, subsetosæ. Abdomen *maris* apice fasciculatum, alarum margines posticos paullo superans, *fœminæ* brevius. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor sat longis. Alæ longiusculæ, mediocriter latæ; anticæ costa recta, margine apicali obliquo, angulo postico plus minusve rotundato.

Noctua, p., *Drury.*
Deiopeia? *Westw.*

Male and Female. Body rather stout, of moderate length. Palpi pilose, slightly curved, much shorter than the head; third joint conical, not half the length of the second. Antennæ slender, setaceous, pubescent and thinly setose, more than half the length of the body; two bristles on each joint. Abdomen of the male tufted at the tip, extending a little beyond the hind wings, shorter in the female. Legs moderately stout; hind tibiæ with four rather long spurs. Wings rather long, moderately broad. Fore wings straight in front, more or less oblique along the apical border; hind angle more or less rounded; third inferior vein very near the first and the second; fourth very remote from the third.

1. Bizone perornata.

Alba; thorax rufo trifasciatus; alæ anticæ rufo quadrifasciatæ guttaque discali nigra.

Male. White. Palpi red, with black tips. Proboscis testaceous. Antennæ brown. Thorax with three red bands. Abdomen mostly reddish except at the tip which has a tuft of whitish hairs. Tibiæ on the outer side and tarsi brown. Fore wings with four red bands, and with a black dot on the disk; first and second bands upright; second band bordered with black on the inner side; third slightly oblique; fourth apical, diffused in front, abbreviated hindward; under side with an elongated flat tubercle in the middle of the fore border; apical border slightly oblique; hind angle somewhat rounded. Hind wings with a slight pale rose hind border.

Var. β. Third band of the fore wings edged with black on its outer side.

Fem. Second band of the fore wings oblique; third edged with brown on the outer side; fourth band wanting or confined to a small red spot; under side with a red spot instead of the tubercle. Hind wings slightly testaceous towards the hind border or wholly white. Length of the body 7 lines; of the wings 18—22 lines.

a. Silhet. Presented by E. Doubleday, Esq.
b, c. Silhet. From Mr. Sowerby's collection.
d. Java. From Mr. Argent's collection.

2. Bizone puella.

Alæ anticæ albæ, macula parva discali nigra, fasciisque quatuor transversis rubris; posticæ luteæ; abdomen luteum. Long. alar. 15 lin.

—— —— *Drury, Ins. Exot.* ii. 3, pl. 2, f. 2.

Phalæna (Noctua) puella, *Drury, App.* ii.
Deiopeia? puella, *Westw. ed. Drury*, ii. 3, pl. 2, f. 2.

Madras.

The second and third red bands of the fore wings are generally edged with brown, the second on its inner side, the third on its outer side.

Var. β. Fore wings with two black dots. Hind wings white, slightly testaceous towards the borders.

a. Nepaul. Presented by Major-General Hardwicke.
b, c. Java. From the Hon. East India Company's collection.

3. Bizone hamata.

Alba; thorax roseo bifasciatus; alæ anticæ roseo quadrifasciatæ, fasciis 2a et 3a sub costam apices versus angulato inclinatis, guttasque duas nigras transverse dispositas includentibus.

White. Palpi black. Proboscis and antennæ tawny. Thorax with two red bands. Tarsi and fore tibiæ mostly black. Wings rosy beneath. Fore wings with four rosy bands, the first basal, the fourth apical, the second and third discal, and each emitting a streak in front towards the tip, the first streak adjoining two black dots placed transversely. Hind wings rosy. Length of the body 5 lines; of the wings 12 lines.

a, b. Shanghai, North China. From Mr. Fortune's collection.

4. Bizone delicata.

Alba; palpi, proboscis et antennæ testacea; thorax rufo bifasciatus; alæ anticæ rufo quadrifasciatæ nigroque biguttatæ.

White. Palpi, proboscis and antennæ testaceous. Thorax with two red bands, the first interrupted, the second at the tip of the scutellum. Legs testaceous, with white tomentum. Fore wings with four red bands; first by the base, shortened hindward; second and third nearly upright, hardly curved; fourth apical; two black dots between the second and third bands, more remote in the female than in the male, the latter sex has a tubercle beneath and a tuft above the middle of the costa. Length of the body 4½—5 lines; of the wings 12—13 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.
b. Sierra Leone. Presented by E. Doubleday, Esq.

5. Bizone signa.

Alba; thorax fascia una rufa; alæ anticæ rufo trifasciatæ nigroque binotatæ.

White. Palpi black. Proboscis testaceous. Antennæ brown. Thorax with a pale red band in front. Fore legs partly brown. Fore wings with three red bands; first at the base, shortened hindward, connected along the costa with the second; second and third slightly curved and oblique, with two black marks in front between them, the first a dot, the second a short oblique transverse streak; in front of these there is an elongated tuft corresponding to a flat partly red tubercle on the under side. Length of the body 5½ lines; of the wings 16 lines.

a. Silhet. From Mr. Argent's collection.

6. Bizone subornata.

Fœm. *Alba; thorax roseo bifasciatus; alæ anticæ roseo quadrifasciatæ interque fascias 2am et 3am nigro triguttatæ; posticæ subroseæ.*

Fem. White. Proboscis, antennæ and legs tawny. Thorax with two rosy bands. Fore wings with four slender rosy bands, the first basal, the fourth apical, the second and third discal, and with

three black dots placed triangularly or in a curved line between them. Hind wings with a slight rosy tinge above. Length of the body 4 lines; of the wings 12 lines.

a. Ceylon. Presented by R. Templeton, Esq.

7. Bizone peregrina.

Alba; caput antice rufum; thorax rufo trifasciatus; alæ anticæ rufo quadrifasciatæ, nigro triguttatæ (Mas) *aut uniguttatæ* (Fœm.); *posticæ nonnunquam roseæ.*

White. Head red in front. Palpi, proboscis and antennæ testaceous. Thorax with three bands. Abdomen slightly tinged with red, sometimes white. Legs partly luteous or brown. Fore wings rarely pale testaceous, with four red bands; the first has occasionally a brown dot on its middle, the second and third have frequently brown borders, the second on the inner side, the third on the outer side; in the male they are slightly curved and oblique, in the female they are generally straight and upright, sometimes slightly oblique and curved; between them in the male there are three black dots, and on the under side the usual tubercle; the female has but one black dot. Hind wings rosy, or white with rosy borders, or wholly white. Length of the body 3—3½ lines; of the wings 10—11 lines.

a. Nepaul. Presented by Major-General Hardwicke.
b—d. Ceylon. Presented by R. Templeton, Esq.
e. East Indies. From Archdeacon Clerk's collection.
f. North India. From Mr. L. James' collection.
g. Silhet. From the Rev. J. Stainforth's collection.
h. Hong Kong. Presented by J. C. Bowring, Esq.
i. Hong Kong. Presented by Capt. Champion.

8. Bizone evidens.

Alba; thoracis discus luteus; alæ luteo submarginatæ, anticæ fasciis tribus nigris maculaque discali rubra.

Chelonia evidens, *Boisd. Guér. Icon. Règne Anim. Ins.* pl. 88, f. 1.

9. Bizone? sanguinea.

Alæ anticæ albæ, sanguineo signatæ et margine externo sanguineo, punctis duobus mediis nigris, subtus sanguineæ, plaga basali cinerascente; posticæ sanguineæ.

Calligena sanguinea, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 14, 66.

North China.

Genus 127. AGYLLA.

Mas. Corpus gracile, sat longum. Palpi corporis dimidio non longiores; articulus 3us acuminatus minimus. Proboscis mediocriter longa. Antennæ graciles, setosæ, subsetaceæ, corporis dimidio multo longiores. Abdomen alas posticas vix superans, apice fasciculatum. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat angustæ, mediocriter longæ; anticæ ad costam subconvexæ, apud marginem apicalem valde obliquæ, posticæ rotundatæ non angulatæ.

Male. Body slender, rather long. Palpi not more than half the length of the head; third joint acuminated, very small. Proboscis moderately long. Antennæ slender, setose, slightly setaceous, much more than half the length of the body. Abdomen extending very little beyond the hind wings, tufted at the tip. Legs slender; hind tibiæ with four spurs of moderate length. Wings rather narrow, of moderate length. Fore wings slightly convex in front, very oblique along the apical border, rounded and not angular behind, with a tuft of short down in the disk beneath; first and second inferior veins united towards the discal areolet; third a little nearer to the second than to the fourth. Hind wings with a thick tuft of down in the disk above.

1. AGYLLA FASCICULATA.

Mas. *Alba; proboscis, palpi et antennæ testacea; alæ quatuor plaga discali cervina, in posticis supra densissime lanuginosa.*

Male. White. Proboscis, palpi and antennæ testaceous. Fore legs partly brown. Wings with a fawn-coloured patch in each disk, largest in the hind wings where it is covered above with thick testaceous wool. Length of the body 4 lines; of the wings 11 lines.

a—c. Venezuela. From Mr. Dyson's collection.

Genus 128. THYONE.

Mas? Corpus gracile. Palpi brevissimi. Proboscis brevis. Antennæ setaceæ, simplices, submoniliformes. Pedes sat robusti;

tibiæ anticæ bidentatæ; posticæ calcaribus duobus longis apicalibus. Alæ angustæ, mediocriter longæ; anticæ ad costam subconvexæ, apud marginem apicalem valde obliquæ, postice rotundatæ non angulatæ, venis 1a 2a et 3a inferioribus approximatis, 4a remota.

Male? Body slender. Palpi very short. Proboscis short. Antennæ setaceous, simple, submoniliform. Legs rather stout; fore tibiæ armed beneath with two long teeth; hind tibiæ with two long apical spurs. Wings narrow, of moderate length. Fore wings slightly convex in front, very oblique along the apical border, rounded and not angular behind; second inferior vein equidistant at the base between the first and the third; third about four times further from the fourth than from the second.

1. THYONE SIMPLEX.

Alba; corpus, palpi, antennæ et pedes testacea, albo tomentosa; tibiæ tarsique antica fusca.

White. Body, palpi, antennæ and legs testaceous, with white tomentum. Fore tibiæ and fore tarsi brown. Length of the body 2 lines; of the wings 8 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 129. MILTOCHRISTA.

Palpi breves, recte porrecti, subpilosi; articuli longitudine subæquales, 1us longi-ovatus; 2us et 3us valde attenuati et elongati, 3us subulatus, valde acutus. Maxillæ capite longiores. Antennæ setaceæ, *maris* subciliatæ. Alæ sat latæ; anticæ subtrigonæ, non subtruncatæ. Pedes mediocres; tibiæ breves, posticæ quadricalcaratæ.

Miltochrista, *Hübn. Verz. Schmett.* 166.
Phalæna Geometra, p., *Forst.*
Bombyx, p., *Fabr.; Stew.; Turt.; Wien. Verz.; Hübn.*
Phalæna, p., *Don.*
Lithosia, p., *Haw.; Ochs.; God.; Meigen.*
Callimorpha, p., *Steph.*

1. MILTOCHRISTA MINIATA.

Alæ miniatæ; anticæ strigis tribus nigris, 2a undata, 3a punctata.

Geometra miniata, *Forster, Nov. Sp. Ins. Cent.* i. 75.

Bombyx rosea, *Fabr. Ent. Syst.* iii. 1, 485, 244. *Geoff. Hist. Ins.* ii. 121, 25; *Naturf.* xii. 60, pl. 1, f. 18. *Esp. Schmett.* iii. 386, pl. 77, f. 1—3; *Pap. d'Eur.* vi. 50, pl. 221, f. 310. *Gmel. ed. Syst. Nat.* i. 5, 2441, 580. *Donov. Nat. Hist. Engl. Ins.* ii. pl. 40. *Panz. Faun. Germ.* 10, 20. *V. Müll. Faun. Siles.* iii. 1. *Vieweg, Tab. Verz.* i. 64, 69. *Borkh. Eur. Schmett.* iii. 237, 75. *Rhein. Mag.* i. 344, 187. *Schwarz, Raup.* 241. *Turt. Syst. Nat.* iii. 229.

Noctua rubicunda, *Wien. Verz.* 68, Fam. C, 10. *Lang. Verz.* ii. 163, 1149, 1150. *Illig. N. Ausg. dess.* i. 180, 10.

Setina rubicunda, *Schr. Faun. Boic.* ii. 2, 166, 14.

Bombyx rubicunda, *Hübn. Bomb.* 128, 2, pl. 26, f. 111; *Larv. Lep.* iii. *Bomb.* 2. *Veræ*, G, a, f. 1, a—c.

Lithosia rosea, *Ochs. Schmett.* iii. 145, 12, 12; iv. 52, 13. *God. Pap. de France*, iii. pl. 39, f. 5, 6. *Meig. Handb.* 119, 37; *Syst. Besch. Eur. Schmett.* iii. 51, 11, pl. 86, f. 9. *Croch. ed. Règne Anim. Atlas, Ins.* pl. 153 bis, 1.

Phalæna rosea, *Don. Nat. Hist. Brit. Ins.* ii. 9, pl. 40, f. inf.

Lithosia miniata, *Haw. Lep. Brit.* 149.

Miltochrista rubicunda, *Hübn. Verz. Schmett.* 166, 1722.

Callimorpha miniata, *Steph Ill. Brit. Ent. Haust.* ii. 90, 2.

Calligenia rosea, *Eversm. Faun. Lep. Volgo-Ural.* 135, 11.

a—d. England. From Mr. Stephens' collection.

e, f. England.

g, h. Europe. From M. Becker's collection.

Genus 130. AMERIA.

Fœm. Corpus lineare, cylindricum, gracillimum. Palpi capitis dimidio paullo longiores; articulus 3us conicus, 2i dimidio non longior. Antennæ graciles, setaceæ, corporis dimidio æquales. Abdomen alarum margines posticos vix attingens. Pedes gracillimi; tibiæ posticæ calcaribus quatuor minutis. Alæ mediocriter longæ et latæ; anticæ ad costam vix convexæ, apud apices subconicæ, angulo postico subrotundato.

Female. Body linear, cylindrical, very slender. Palpi a little more than half the length of the head; third joint conical, not more than half the length of the second. Proboscis moderately long. Antennæ slender, setaceous, bare about half the length of the body. Prothorax rather long. Abdomen hardly extending so far as the hind wings. Legs very slender; hind tibiæ with four minute spurs. Wings of moderate length and breadth. Fore wings hardly convex

in front, nearly conical about the tips; hind angle slightly rounded; second inferior vein about equidistant between the first and the third; third about thrice further from the fourth than from the second. Hind wings with four inferior veins; second nearer to the first than to the third; third full twice further from the fourth than from the second.

1. AMERIA INVARIA.

Aurantiaca; palpi apice nigri; proboscis, antennæ, tibiæ apice tarsique nigra; alæ nigrò tenuissime marginatæ.

Bright orange. Palpi black towards the tips. Proboscis, antennæ, tibiæ towards the tips and tarsi black. Wings with a very narrow black border. Length of the body 3½—4½ lines; of the wings 9—11 lines.

a, b. Venezuela. From Mr. Dyson's collection.
c. ——— ?

2. AMERIA CONFORMIS.

Aurantiaca; antennæ, tibiæ anteriores et tarsi nigra; femora antica nigro strigata; alæ anticæ apice nigro ciliatæ.

Orange. Proboscis tawny. Antennæ, tarsi and anterior tibiæ black. Fore femora with black streaks. Fore wings fringed with black at their tips and along the outer border. Length of the body 4 lines; of the wings 12 lines.

a. Mexico. From M. Hartweg's collection.

Genus 131. MYRICE.

Fœm. Corpus sat gracile, mediocriter longum. Palpi arcuati, capite paullo breviores; articulus 3us minimus. Antennæ setaceæ, validiusculæ, subtus pubescentes, corporis dimidio longiores. Abdomen alarum margines posticos vix attingens. Pedes graciles; tibiæ anticæ subtus dentatæ, posticæ calcaribus duobus longis apicalibus. Alæ mediocriter longæ et latæ; anticæ ad costam rectæ, apud marginem apicalem obliquæ, angulo postico vix rotundato.

Female. Body rather slender, of moderate length. Palpi curved, a little shorter than the head; third joint very minute, not

more than one-sixth of the length of the second. Antennæ setaceous, pubescent beneath, rather stout, more than half the length of the body. Abdomen not extending quite so far as the hind wings. Legs slender; fore tibiæ with a tooth beneath; hind tibiæ with two long apical spurs. Wings moderately long and broad. Fore wings straight in front, oblique along the apical border; hind angle hardly rounded; second inferior vein at the base a little nearer to the third than to the first; third a little further from the fourth than from the second.

1. MYRICE TRANSIENS.

Cinerea; caput et thorax luteo-hirta; alæ anticæ macula media postica alba.

Gray. Head and thorax clothed with luteous hairs. Palpi brown, testaceous beneath. Proboscis testaceous. Tarsi whitish. Fore wings with a white spot on the middle of the hind border. Length of the body 4 lines; of the wings 11 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 132. ASIONA.

Fœm. Corpus gracile, longiusculum. Palpi capitis dimidio non longiores; articulus 3us conicus, minimus. Proboscis brevis. Antennæ setaceæ, validiusculæ, subtus serratæ aut subpectinatæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus duobus longis. Alæ mediocriter longæ et latæ; anticæ ad costam subconvexæ, apud marginem apicalem valde obliquæ, angulo postico rotundato, venis 2a et 3a inferioribus basi fere contiguis.

Female. Body slender, rather long. Palpi not more than half the length of the head; third joint conical, very small. Proboscis short. Antennæ setaceous, rather stout, serrated, or minutely pectinated beneath, about half the length of the body. Abdomen extending a little beyond the hind wings. Legs slender; hind tibiæ with two long apical spurs. Wings moderately long and broad. Fore wings slightly convex in front, very oblique along the apical border; hind angle rounded; second and third inferior veins almost contiguous at the base; third rather nearer to the first than to the fourth.

1. ASIONA INÆQUALIS.

Cinerea ; caput et thorax luteo-hirta.

Gray. Head and thorax clothed with luteous hairs. Antennæ towards the base, pectus, abdomen beneath and legs whitish. Wings with black veins. Length of the body 4 lines; of the wings 10 lines.

a. Ega, Brazil. From Mr. Bates' collection.

Genus 133. SOLOE.

Mas. Corpus sat gracile, mediocriter longum. Palpi recti, ascendentes, capite longiores; articulus 3us linearis, apice conicus, 2o brevior et gracilior. Proboscis longiuscula. Antennæ setaceæ, mediocriter pectinatæ. Abdomen alarum margines posticos attingens. Pedes sat validi; tibiæ posticæ calcaribus duobus apicalibus longis. Alæ latiusculæ, non longæ ; anticæ ad costam rectæ, apud marginem apicalem obliquæ, angulo postico rotundato.

This genus may form a connecting link with the *Noctuides* by means of *Ophiusa*.

Male. Body rather slender, of moderate length. Palpi straight, ascending, longer than the head ; third joint linear, conical at the tip, shorter and more slender than the second. Proboscis rather long. Antennæ setaceous, moderately pectinated; the length of the branches decreasing from near the base to the tips. Abdomen extending as far as the hind wings. Legs rather stout; hind tibiæ with two long apical spurs. Wings rather broad, not long. Fore wings straight in front, oblique along the apical border, rounded on the hind angle; second inferior vein at the base nearer to the first than to the third, which is nearly four times further from the fourth than from the second.

1. SOLOE TRIGUTTA.

Testacea ; palpi apice nigri ; alæ subcinereæ aut albidæ ; anticæ guttis duabus, posticæ una nigris.

Pale testaceous. Palpi black towards the tips. Tibiæ more or less striped with black. Wings pale cinereous or whitish. Fore wings with two black dots which are near the fore border, the first a

little before one-third of the length, the second a little before two-thirds of the length; costa black towards the base. Hind wings with one black dot which is near the fore border, and opposite to the first dot of the fore wings. Length of the body 5½—7 lines; of the wings 14—18 lines.

a. ——— ? Presented by E. Doubleday, Esq.
b. Sierra Leone. Presented by the Rev. D. F. Morgan.
c. Congo. Presented by Sir J. Richardson.
d, e. ——— ? From Mr. Milne's collection.
f. ——— ?

2. Soloe guttivaga.

Flava; palpi pedesque testacei; alæ albidæ, anticæ guttis duabus in fasciam dispositis, posticæ gutta una marginali, nigris.

Yellow. Palpi and legs whitish testaceous. Proboscis tawny. Wings whitish. Fore wings with two black dots which are in a transverse line at very little beyond the middle, the one near the fore border, the other near the hind border. Hind wings with one black dot which is very near the hind border by the tip of the inner margin; a second dot appears beneath in the disk. Length of the body 5 lines; of the wings 16 lines.

a. Ashanti. From the Wesleyan Missionary Society's collection.

Genus 134. SECUSIO.

Fœm. Corpus lineare, cylindricum, longiusculum, sat gracile. Palpi porrecti, capitis longitudine; articulus 3us acuminatus, 2i dimidio paullo longior. Proboscis brevis. Antennæ setaceæ, dense et mediocriter pectinatæ, corporis dimidio paullo longiores. Abdomen alarum margines posticos vix attingens. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocribus. Alæ latiusculæ, non longæ.

Female. Body linear, cylindrical, rather long and slender. Palpi porrect, as long as the head; third joint acuminated, a little more than half the length of the second. Proboscis short. Antennæ setaceous, thickly pectinated, rather more than half the length of the body; branches of moderate length. Abdomen hardly extending so far as the hind wings. Legs slender; hind tibiæ with four spurs of moderate length. Wings rather broad, not long. Fore wings straight in front, oblique along the apical border; hind angle not

rounded; second inferior vein about equidistant between the first and the third; third about thrice further from the fourth than from the second.

1. SECUSIO STRIGATA.

Lutea; caput et thorax fusca, illum apud oculos testaceum subtus albidum; palpi basi albidi; proboscis testacea; antennæ nigræ; abdomen subtus e guttis nigris bivittatum; alæ anticæ supra cervinæ, fascia obliqua discali maculari alba.

Pale luteous. Head and thorax brown; head luteous about the eyes, whitish beneath. Palpi at the base whitish. Proboscis testaceous. Antennæ black. Thorax with two testaceous stripes on each side, and in front with a testaceous circlet on each side. Abdomen with a row of black dots on each side beneath. Fore wings fawn-colour above, with an oblique white discal band which is composed of three or four spots. Length of the body 5½ lines; of the wings 15 lines.

a. Port Natal. From M. Gueinzius' collection.
b. ———? From Mr. Milne's collection.

Genus 135. PETOVIA.

Corpus sat gracile, mediocriter longum. Palpi brevissimi. Proboscis brevis. Antennæ *maris* mediocriter pectinatæ, *fœminæ* simplices, corporis dimidio breviores. Abdomen sensim attenuatum, alarum margines posticos non attingens. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus parvis. Alæ latiusculæ, non longæ; anticæ ad costam rectæ, apice angulosæ, apud marginem apicalem valde obliquæ, angulo postico subrotundato, venis tribus inferioribus.

Approaches the *Geometrides*.

Body rather slender, of moderate length. Palpi very short. Proboscis short. Antennæ of the male moderately pectinated, of the female simple, less than half the length of the body. Abdomen tapering slightly from the base to the tip, not extending so far as the hind wings. Legs slender; hind tibiæ with two short apical spurs. Wings rather broad, not long. Fore wings straight in front, angular at the tips, very oblique along the apical border; hind angle somewhat rounded; three inferior veins, second much nearer to the first than to the third.

1. PETOVIA MARGINATA.

Mas. *Nigra; caput postice, thorax antice, vittæ quatuor discales abdominisque fasciæ testacea; alæ venis pallidis marginibus nigris, anticæ flavæ, posticæ luteæ.* Fœm.? *Alæ nigro venosæ, anticæ obscure cervinæ.*

Male. Black. Head behind, thorax in front, four discal stripes and bands on the abdominal segments testaceous. Wings with pale veins and with a black indented border. Fore wings yellow. Hind wings luteous. *Female?* Wings with black veins. Fore wings dingy fawn-colour. Length of the body 5 lines; of the wings 16—18 lines.

a. Interior of South Africa. Presented by the late Earl of Derby.
b, c. Port Natal. From M. Gueinzius' collection.

Genus 136. CHARILINA.

Mas. Corpus sublineare, longiusculum, sat gracile. Caput antice conicum. Palpi recti, capite paullo longiores; articulus 3us linearis, gracilis, 2o paullo brevior. Proboscis brevis. Antennæ setaceæ, subpubescentes, validiusculæ, corporis dimidio non longiores. Abdomen alarum margines posticos attingens, apice fasciculatum. Pedes sat validi; tibiæ anticæ subtus dentatæ, posticæ calcaribus quatuor longis. Alæ latiusculæ, non longæ; anticæ ad costam vix convexæ, apud marginem apicalem obliquæ, angulo postico rotundato, venis 1a 2a et 3a inferioribus basi approximatis, 4a remota.

Allied to *Ophiusa? Male.* Body rather long and slender, nearly linear. Head conical in front. Palpi straight, a little longer than the head; third joint linear, slender, a little shorter than the second. Proboscis short. Antennæ setaceous, minutely pubescent, rather stout, about half the length of the body. Abdomen extending as far as the hind wings, tufted at the tip. Legs rather stout; fore tibiæ dentated beneath; hind tibiæ with four long spurs. Wings rather broad, not long. Fore wings hardly convex in front, oblique along the apical border; hind angle rounded; first, second and third inferior veins approximate at the base; fourth remote.

1. CHARILINA AMABILIS.

Fulva; alæ anticæ rufæ, margine maculisque plurimis flavis, his nigro cinctis; alæ posticæ luteæ, macula discali margineque nigris, hac intus flexuosa.

Ægocera amabilis, *Boisd. Spec. Gén. Lép.* i. pl. 14, f. 6. *Westw. ed. Drury*, ii. 25, pl. 13, f. 3.
Phalæna (Noctua) amabilis, *Drury, Ins.* ii. 23, pl. 13, f. 3; *Index.*
Crameria amabilis, *Hübn. Verz. Schmett.* 168, 1734.
West Africa.

a. ——— ? From Mr. Milne's collection.
b, c. ——— ?

Included erroneously with *Ægocera* in page 58 of this Catalogue.

2. CHARILINA? INO.

Alæ albidæ, anticæ punctis duobus humeralibus maculisque duabus magnis nigris (scil. ante et pone medium); thorax nigro punctatus.

Phalæna (Noctua) Ino, *Drury, App.* iii.; *Ill. Exot. Ins.* iii. 39, pl. 29, f. 3.
Lithosia? Ino, *Westw. ed. Drury*, iii. 40, pl. 29, f. 3.
Madras.

Genus 137. CASTULO.

Mas. Corpus validiusculum, mediocriter longum. Palpi porrecti, capite breviores; articulus 3us acuminatus, minimus, 2i quadrario brevior. Proboscis brevis. Antennæ late pectinatæ, corporis dimidio paullo longiores. Abdomen alarum margines posticos non attingens. Pedes sat graciles; tibiæ anticæ subtus dentatæ, posticæ calcaribus quatuor longis. Alæ latæ, non longæ; anticæ ad costam fere rectæ, apud marginem apicalem obliquæ, angulo postico vix rotundato, venis 1a 2a et 3a inferioribus basi approximatis, 4a remota.

Male. Body rather stout, of moderate length. Palpi porrect, shorter than the head; third joint acuminated, very small, not one-fourth of the length of the second. Proboscis short. Antennæ

deeply pectinated, rather more than half the length of the body. Abdomen not extending so far as the hind wings. Legs rather slender; fore tibiæ armed beneath with a long tooth; hind tibiæ with four long spurs. Wings broad, not long. Fore wings almost straight in front, oblique along the apical border; hind angle hardly rounded; first, second, and third inferior veins approximate at the base; fourth remote.

1. CASTULO PLAGIATA.

Luteo-testacea; caput, antennæ, thoracis fascia lata, antennæ et pedes nigra; alæ anticæ fasciis duabus latissimis maculaque intermedia viridi-nigris; posticæ gutta media margineque nigris.

Pale luteous. Head, palpi, antennæ, a broad band across the thorax, and legs black. Abdomen blackish beneath. Fore wings greenish black, with an irregularly curved pale luteous band which contains a black spot, and is continued along the hind border to the base where it is dilated. Hind wings with a black dot in the middle of the disk and with a black border which has a gray fringe. Length of the body 4½ lines; of the wings 14 lines.

Var. β. *Viridi-nigra; palpi pedesque testacei; antennæ fuscæ; prothorax testaceus nigro biguttatus; abdominis segmenta testaceo marginata; alæ anticæ basi fasciaque lata guttam nigram includente testaceis; posticæ testaceæ nigro-fusco late marginatæ.*

Greenish black. Palpi testaceous, with black hairs. Antennæ brown. Prothorax testaceous, with a black dot on each side. Pectus with testaceous hairs. Abdomen with a testaceous band on the hind border of each segment. Legs testaceous, slightly shaded with brown. Fore wings testaceous at the base and with a broad testaceous band beyond the middle; this band includes a black spot and is undulating and concave on the inner side, and more concave on the outer side, and is connected by a slender stripe along the hind border with the testaceous base. Hind wings testaceous with broad blackish brown borders. Length of the body 4½ lines; of the wings 12 lines.

a. Van Dieman's Land. From Mr. A. J. Smith's collection.
b—g. New Holland. Presented by Major-General Hardwicke.
h. Van Dieman's Land. Presented by Morton Allport, Esq.

Genus 138. BRYCEA.

Mas. Corpus sat gracile, mediocriter longum. Palpi validi, ascendentes, capite paullo breviores; articulus 3us acuminatus, 2i triente non longior. Antennæ setaceæ, sat robustæ, subpubescentes, vix serratæ, corporis dimidio longiores. Abdomen apice forcipatum, alarum margines posticos non attingens. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ, non longæ: anticæ ad costam subconvexæ, apud marginem apicalem valde obliquæ, angulo postico rotundato.

Male. Body rather slender, moderately long. Palpi stout, ascending, a little shorter than the head; third joint acuminated, about one-third of the length of the second. Antennæ setaceous, rather stout, minutely pubescent, hardly serrated, more than half the length of the body. Abdomen forcipated at the tip, not extending so far as the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings rather broad, not long. Fore wings slightly convex in front, very oblique along the apical border; hind angle rounded; third inferior vein further from the fourth than from the second, which is near the first at the base.

1. Brycea disjuncta.

Nigro-viridis; prothorax luteus; alæ anticæ linea discali abbreviata, macula oblonga obliqua subapicali guttaque postica luteis; posticæ fusco-nigræ vitta discali abbreviata apice incisa lutea.

Greenish black. Prothorax luteous. Fore wings with a slender linear luteous stripe extending in the disk along nearly two-thirds of the length from the base; a very short oblique luteous band in the disk near the tip, and a luteous dot near the hind angle. Hind wings with a luteous stripe in the disk, widening from the base to beyond three-fourths of the length, and with a right-angled incision at its tip in front. Length of the body 5 lines; of the wings 16 lines.

a. Brazil. From M. Becker's collection.

Genus 139. RUSCINO.

Mas. Corpus sat robustum, non longum. Palpi brevissimi, articulus 3us acuminatus, minimus. Proboscis mediocriter longa.

Antennæ setaceæ, validiusculæ, subcompressæ, vix serratæ. Abdomen alarum margines posticos vix attingens. Pedes robusti; tibiæ posticæ calcaribus quatuor parvis. Alæ latæ, longiusculæ; anticæ ad costam subconvexæ, apud marginem apicalem obliquæ et valde convexæ, postice rotundatæ non angulatæ.

Male. Body rather stout, not long. Palpi very short; third joint acuminated, very small. Proboscis moderately long. Antennæ setaceous, rather stout, slightly compressed, very minutely serrated. Abdomen hardly extending so far as the hind wings. Legs stout; hind tibiæ with four small spurs. Wings broad, rather long. Fore wings slightly convex in front, oblique and very convex on the apical border, rounded and not angular behind; second inferior vein nearer to the first than to the third; third about four times further from the fourth than from the second.

1. RUSCINO MENEA.

Lutea; antennæ, abdominis vitta ventralis et pedes nigra; alæ nigræ, anticæ fasciis duabus posticæque dimidio basali luteis.

Var. a. Luteous. Antennæ and legs black. Abdomen with a broad black stripe beneath. Wings black. Fore wings before the middle with an upright luteous band which is narrow in the disk and widened at each end; a second almost semicircular band near each tip. Basal half of the hind wings luteous except a black spot beneath at the base of the costa; outline of the luteous part curved and extending from the end of the inner border to beyond half the length of the costa.

Var. β. First band of the fore wings very broad, widening slightly hindward; subapical band widening in front. Length of the body 4—5 lines; of the wings 15—18 lines.

a. Honduras. From Mr. Dyson's collection.
b ——— ? Presented by E. Doubleday, Esq.

Genus 140. EUDESMIA.

Mas. Corpus sat robustum, non longum. Palpi mediocriter longi, capite breviores; articulus 3us acuminatus, 2i dimidio brevior. Antennæ simplices, setaceæ. Proboscis sat longa. Abdomen alarum margines posticos vix attingens. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, longiusculæ; anticæ ad costam

subconvexæ, apud marginem apicalem subobliquæ et subconvexæ, angulo postico rotundato.

Eudesmia, *Hübn.*

Male. Body rather stout, not long. Palpi moderately long, shorter than the head; third joint acuminated, not half the length of the second. Antennæ simple, setaceous. Proboscis rather long. Abdomen hardly extending so far as the hind wings. Legs stout; hind tibiæ with four long spurs. Wings broad, rather long. Fore wings slightly convex in front, slightly oblique and convex along the apical border; hind angle somewhat rounded; second inferior vein about thrice further from the third than from the first; third twice further from the fourth than from the second.

1. EUDESMIA RUFICOLLIS.

Nigro-viridis; thorax anticus abdominisque fascia supra lata interrupta subtus angusta integra testacea; alæ anticæ fascia lata subarcuata discali maculisque duabus subapicalibus subtrigonis testaceis; posticæ vitta latissima testacea.

Eudesmia ruficollis, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, viii. *Callimorphæ B. Variegatæ*, 4, f. 1—4.

a. Brazil. From M. Becker's collection.

Genus 141. DEIOPEIA.

Palpi elongati, supra recurvi subsquamosi; articulus 1us crassus; 2us longus; 3us brevis, ovatus. Maxillæ capite multo longiores. Antennæ in utroque sexu simplices, sat breves, *maris* subtus subpilosæ. Alæ anticæ oblongæ, subelliptico-truncatæ; posticæ subdiaphanæ, valde plicatæ. Pedes mediocres; tibiæ brevissimæ, posteriores apice quadricalcaratæ.

Tinea, p., *Linn.*
Bombyx, p., *Fabr.*; *Hübn.*
Noctua, p., *Esper.*
Lithosia, p., *Haw.*; *Meig.*; *Duponch.*; *Guér.*
Argina et Utethesia, *Hübn. Verz. Schmett.* 167, 168.
Eyprepia, p., *Ochs.*
Eulepia, p., *Curt.*
Deiopeia, *Steph. Ill. Brit. Ent. Haust.* ii. 92; *Duponch.*
Euchelia, p., *Boisd.*
Euprepia, p., *Zeller.*

1. DEIOPEIA PULCHELLA.

Alæ anticæ flavescentes, atro sanguineoque punctatæ; posticæ lacteæ nigro marginatæ.

Tinea pulchella, *Linn. Syst. Nat.* i. 2, 884, 349. *Scop. Ent. Carn.* 208, 514. *Sulz. Ins.* ii. 162, pl. 23, f. 11. *Schwarz, Raup.* 332, 472. *Petiv. Gazoph.* pl. 3, f. 3.

Noctua pulchra, *Wien. Verz.* 68, *Fam.* C. 9. *Illig. N. Ausg. dess.* i. 179, 9. *Esp. Schmett.* iv. 570, pl. 164, f. 3—5; *Pap. d'Eur.* vi. 48, pl. 221, f. 309. *Schr. Faun. Boic.* ii. 1, 315, 1512. *Lang. Verz.* ii. 163, 1148.

Bombyx pulchella, *Fabr. Sp. Ins.* ii. 203, 142; *Mant. Ins.* ii. 131, 197; *Ent. Syst.* iii. 179, 224. *Schæff. Icon.* pl. 122, f. 1. *Nomencl. Panz.* 126. *Panz. Faun. Germ.* 95, 24. *Rossi, Faun. Etr.* ii. 177, 1103, pl. A. f. 8; *ed. Illig.* 283, 1103. *Gmel. ed. Syst. Nat.* i. 5, 2446, 349.

Phalæna Lotrix, *Cram. Pap. Exot.* ii. 20, pl. 109, f. E.

Bombyx pulchra, *Borkh. Eur. Schmett.* iii. 259, 89. *Hübn. Bomb.* 128, 1, pl. 26, f. 113; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, G. f. 1.

Lithosia pulchra, *Ochs. Schmett. Eur.* iii. 304, 4; iv. 59, 4. *God. Pap. de France*, v. pl. 42, f. 4. *Meig. Handb.* 138, 87; *Syst. Beschr. Eur. Schmett.* iii. 472. *Guér. Icon. Règne Anim. Ins.* pl. 88, f. 8.

Utethesia pulchra, *Hübn. Verz: Schmett.* 178, 1733.

Lithosia pulchella, *Haw. Lep. Brit.* 150. *Duponch. Cont. Lép. France*, v. 23, 135, pl. 42, f. 4.

Eulepia pulchra, *Curt. Brit. Ent.* iv. pl. 169.

Deiopëia pulchella, *Steph. Ill. Brit. Ent. Haust.* ii. 93, 1. *Duponch. Cat. Lép.*

Euchelia pulchra, *Boisd. Faun. Ent. Mad. Bomb. et Maur.* 85, 1.

Euprepia pulchra, *Zeller, Isis*, 1847, 432, 100.

Callimorpha pulchra, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 151, 45.

This species exhibits many slight variations in the proportion and arrangement of the red and black marks in the fore wings. The red marks are most prevalent in a specimen from Ashanti, and are least apparent in one from Port Essington and in another from Congo. Nearly all the black marks are wanting in a Turkey *D. pulchra*.

a, *b*. England. From Mr. Stephens' collection.
c. France. From M. Becker's collection.
d. Spain. Presented by Benj. Frend, Esq.
e. Turkey. From Mr. Loftus' collection.
f. Ashanti. From the Wesleyan Missionary Society's collection.
g. Congo. Presented by Sir J. Richardson.
h. Port Natal. From M. Gueinzius' collection.
i. Interior of South Africa. Presented by the late Earl of Derby.
j. Nepaul. Presented by Major-General Hardwicke.
k. North India. Presented by Col. Hearsay.
l. Ceylon. Presented by R. Templeton, Esq.
m. Philippine Isles. Presented by J. C. Bowring, Esq.
n. Keelong Isles. Presented by C. Darwin, Esq.
o. New Holland. Presented by J. Hunter, Esq.
p. Port Essington. From Mr. Gould's collection.
q. Sydney. From Mr. Lambert's collection.
r. "At sea, Lat. 6° N.; Long. 22½ W. Probably from Madeira." Voyage of H. M. S. Rattlesnake.
s. ——— ?

2. Deiopeia ornatrix.

Alba; caput et thorax nigro guttata; thorax rufo bimaculatus; alæ anticæ roseo-albidæ strigis rufis guttisque nigris costalibus et apicalibus, subtus rufæ maculis nonnullis nigris; posticæ antice rufæ, margine nigro, fœm. *præsertim in discum plagas emittente.*

Noctua ornatrix, *Linn. Syst. Nat.* ii. 829, 120. *Cram. Pap. Exot.* ii. 107, pl. 166, f. C. D. *Drury, Ins. Exot.* i. 51, pl. 24, f. 2.
Bombyx ornatrix, *Fabr. Ent. Syst.* iii. 1, 80, 225. *Gmel. ed. Syst. Nat.* i. 5, 2444, 110. *Oliv. Enc. Méth.* v. 100, 258.
Deiopeia ornatrix, *Westw. ed. Drury*, i. 46, 24, f. 2.
Utetheisa ornatrix, *Hübn. Verz. Schmett.* 168, 1732.
Uthetheisa ornatrix, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, iv. *Lithosiæ* D. *Vulgares?*

a. Bolivia. From Mr. Bridges' collection.
b—d. Brazil. From Mr. Stevens' collection.
e. Venezuela. From Mr. Dyson's collection.
f. Santa Fé de Bogota, Presented by C. Darwin, Esq.
g. Nevis. Presented by the Entomological Club.
h—j. ——— ?

Var. β. *Alæ anticæ guttis nigris quadrifasciatæ, fascia 4a divisa.*

a. Honduras. From Mr. Dyson's collection.

3. Deiopeia venusta.

Alba; caput et thorax nigro maculata; thorax rufo bimaculatus; alæ anticæ nigræ maculis rufis albo cinctis plagaque discali nonnunquam obsoleta alba; posticæ nigro marginatæ.

Uthetheisa venusta, *Hübn. Samml. Exot. Schmett.* 29, 261, f. 521, 522.

Euchelia formosa, *Boisd. Faun. Ent. Mad. Bourb. et Maur.* 85, 2.

Madagascar. Bourbon. Mauritius.

a, b. ——— ? Presented by E. Doubleday, Esq.

4. Deiopeia bella.

Alæ anticæ albidæ, fasciis sex punctorum nigrorum fasciis fulvis divisis; posticæ rubræ apice nigræ.

Tinea bella, *Linn. Syst. Nat.* i. 2, 884, 348, 399; *Mus. Lud. Ulr. Drury, Ins. Exot.* i. 51, pl. 24, f. 3. *Cram. Pap. Exot.* ii. 20, 109, C. D. *Ray, Ins.* 211, 1. *Petiv. Gazoph.* i. pl. 3, f. 1. *Catesby, Carol.* ii. pl. 96. *Fabr. Sp. Ins.* ii. 203, 141; *Mant. Ins.* ii. 131, 196; *Ent. Syst.* iii. 1, 479, 223. *Oliv. Enc. Méth.* v. 99, 256. *Gmel. ed. Syst. Nat.* i. 5, 2447, 348.

Deiopeia bella, *Westw. ed. Drury*, i. 46, pl. 24, f. 3. *Duncan, Nat. Libr.* xxxvii. 191, pl. 24, f. 1.

The black marks of the wings, especially of the hind wings, and of the under side of the fore wings, vary much in size.

a—c. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

d—h. United States.

i. Nova Scotia. From Lieut. Redman's collection.

5. Deiopeia speciosa.

Alba; caput et thorax albo maculata; thorax rufo bimaculatus; alæ anticæ fasciis alternis nigris macularibus rufisque, subtus rufæ, maculis nigris; posticæ rufæ, maculis duabus anticis nigris albo marginatis.

White. Head and thorax with black spots. Thorax with a red spot on each shoulder. Fore wings with alternate black and red bands, the former macular, the latter angular and very variable as to breadth; under side deep red with a few black spots. Hind wings red, with two or three variable black white-bordered spots in front, and with a black border. Length of the body 7 lines; of the wings 18 lines.

a, *b*. Jamaica. From Mr. Gosse's collection.
c. ——— ? Presented by E. Doubleday, Esq.

6. Deiopeia dulcis.

Albido-testacea; thorax nigro maculatus; abdomen luteum, nonnunquam e maculis nigris bivittatum; alæ anticæ e maculis nigris albo cinctis septemfasciatæ; posticæ luteæ maculis nonnullis nigris.

Phalæna Geometra cribraria, var. *Cram. Pap. Exot.* iii. 172, pl. 288, f. D.

Whitish testaceous. Palpi with black tips. Proboscis tawny. Antennæ black, testaceous at the base. Abdomen luteous, occasionally with three stripes of black spots. A black spot on each of the fore coxæ. Fore wings with seven bands of white-bordered black spots which on the under side are larger and without white borders. Hind wings luteous, with some black spots which vary in number from three to ten. Length of the body 5½—7 lines; of the wings 16—20 lines.

a. Malabar Coast. Presented by S. N. Ward, Esq.
b. East Indies. From Archdeacon Clerk's collection.
c. East Indies. Presented by E. Doubleday, Esq.
d. ——— ?
e. ——— ?

7. Deiopeia cingulifera.

Lutea; thorax nigro bimaculatus; alæ anticæ e maculis nigris albo cinctis septemfasciatæ; posticæ macula transversa discali vittaque marginali margineque interrupta nigris.

Luteous. Head with a black and white band in front. Palpi black towards the tips. Proboscis tawny. Antennæ black. Thorax with a black spot on each shoulder and one on the scutellum. Fore

wings with seven irregular bands of black white-bordered spots. Hind wings with an oblique transverse spot in the disk, and with a black interrupted stripe near the hind border. Length of the body 7 lines; of the wings 18 lines.

a. Congo. Presented by Sir J. Richardson.

8. Deiopeia Astrea.

Alæ fulvæ; anticæ fasciis septem albidis nigro punctatis; posticæ fulvæ nigro punctatæ.

——— —— *Drury, Ins. Exot.* ii. 11, pl. 6, f. 3.
Phalæna (Noctua) Astrea, *Drury, App.* ii. *Oliv. Enc. Méth.* viii. 261, (Noctua, A.)
Phalæna (Bombyx) Pylotis, *Fabr. Ent. Syst.* iii. 1, 479, 222. *Gmel. ed. Syst. Nat.* i. 5, 2440, 575. *Clerck, Icon.* pl. 54, f. 4.
Phalæna Geometra cribrata, *Gmel. ed. Syst. Nat.* i. 5, 2482, 751.
Argina Pylotis, *Hübn. Verz. Schmett.* 167, 1729.
Deiopeia Astrea, *Westw. ed. Drury*, ii. 13, pl. 6, f. 3.
Euchelia Pylotis, *Boisd. Faune Ent. Mad. Bourb. et Maur.* 85, 3.

Gold Coast, Africa. Madagascar. Bourbon. Mauritius.

Abdomen with three stripes of black spots.

Var. β. Fore wings with seven somewhat regular bands of distinctly white-bordered black spots. Hind wings with two bands of black spots and one black spot in the disk.

Var. γ. White borders of the black spots indistinct. Hind wings with two black spots in the disk.

Var. δ. Black spots without white borders.

Var. ε. Hind wings with three black spots in the disk.

Var. ζ. Abdomen without spots.

Var. η. Spots of the fore wings clouded with gray.

a—c. Ceylon. Presented by R. Templeton, Esq.
d—f. North India. From Mr. Stevens' collection.
g—k. North India. From Mr. L. James' collection.
l. East Indies. Presented by E. Doubleday, Esq.
m, n. East Indies.
o. Hong Kong. Presented by J. C. Bowring, Esq.
p, q. ———? From Mr. Milne's collection.
r. ———?

9. Deiopeia ocellina.

Lutea; thorax nigro trimaculatus; abdomen e maculis nigris trivittatum; alæ anticæ e maculis nigris albo cinctis septemfasciatæ; posticæ maculis una aut duabus discalibus margineque irregulari nigris.

Luteous. Palpi with black tips. Antennæ black, luteous at the base. Thorax with a black spot on each shoulder and one on the scutellum. Abdomen with three stripes of black spots. Legs partly black, and with a black spot on each fore coxa. Fore wings with seven bands composed of white-bordered black spots. Hind wings with one or two black spots in the disk, and with an irregular and interrupted black border. Length of the body 6—7 lines; of the wings 16—20 lines.

a. Port Natal. From Dr. Krauss' collection.
b. Zoolu Country, South Africa. Presented by G. F. Angas, Esq.
c, *d*. Madagascar. From M. Becker's collection.

10. Deiopeia lepida.

Lutea; caput, pectus et abdomen subtus nigra; alæ nigro maculatæ marginibus dentato vel ramoso nigris.

Luteous. Head black, luteous in front. Palpi with black tips. Antennæ, proboscis and legs black. Thorax with a black spot on each side. Abdomen with four rows of black spots which towards the base are replaced by black bands; under side black with a row of luteous spots. Fore wings with four transverse black spots along the costa, and four more of various size and shape forming a curved stripe in the disk, and with two marginal rows of spots which are united and form a black patch at the tip of the costa. Hind wings with a discal stripe of black spots, and with a black border which emits branches towards the disk. Length of the body 6½ lines; of the wings 18 lines.

a. Port Natal. From M. Gueinzius' collection.

11. Deiopeia Argus.

Luteo-fulva aut rosea; caput et thorax nigro maculata; abdomen e maculis nigris trivittatum; alæ anticæ guttis nigris albido cinctis sexfasciatæ, subtus maculis rufis; posticæ nigro maculatæ.

Euprepia? Argus, *Kollar, Kaschmir von Von Hugel*, 467, pl. 21, f. 3.

Rose-colour or luteous. Head with a black whitish bordered spot in front. Palpi black towards the tips. Proboscis tawny. Antennæ black. Thorax with six black whitish bordered spots, two in front, three in the middle, and one behind. Abdomen with three rows of black dots above and three below. Fore coxæ with a black white-bordered spot on each. Fore wings with six irregular oblique bands of whitish bordered black dots of different shapes; under side with bands of black spots. Hind wings with several black spots which form two very irregular bands. Length of the body 7—8 lines; of the wings 22—26 lines.

a. Nepaul. Presented by Major-General Hardwicke.
b. North India. From Mr. Stevens' collection.
c. Simla, Hindostan. From Capt. Parry's collection.
d. Ceylon. Presented by R. Templeton, Esq.

12. Deiopeia Syringa.

Cinerea; palpi nigri; thorax nigro maculatus; abdomen roseum, e maculis nigris trivittatum; alæ anticæ obscure rufescentes, e guttis nigris albido cinctis cinereoque nebulosis septemfasciatæ; posticæ roseæ nigro maculatæ.

Phalæna Syringa, *Cram. Pap. Exot.* i. 8, pl. 5, f. C, D.
Bombyx Crotalariæ, *Fabr. Ent. Syst.* iii. 473, 204. *Oliv. Enc. Méth.* v. 94, 239.
Argina Crotalariæ, *Hübn. Verz. Schmett.* 167, 1730.

Gray. Palpi black, whitish towards the base. Proboscis testaceous. Thorax with black whitish bordered dots. Abdomen rose-colour, with three rows of black dots. Fore coxæ with a black dot on each. Fore wings dull pale reddish, with seven oblique irregular bands of black whitish bordered gray-encircled dots of different shapes; under side brighter red with seven bands of black spots. Hind wings rose-colour with several black spots which vary in number and form two or three irregular bands. Length of the body from lines; of the wings 19—23 lines.

a, *b*. North India. From Mr. Stevens' collection.
c. New Holland. Presented by J. Hunter, Esq.
d, *e*. ——— ?

13. Deiopeia gratiosa.

Alæ anticæ luteæ, rubro maculatæ, fascia lata fusca lineis rubris interrupta; posticæ roseæ, basi dilutiores; thorax ruber, maculis flavis nigro punctatis; abdomen roseum.

Euchelia gratiosa, *Guér. Voy. Delessert, Hist. Nat.* 90, pl. 26, f. 1.
Neelgherry Mountains.

14. Deiopeia extrema.

Alba; palpi apice fusci; antennæ testaceæ; thorax maculis quinque anticis luteis; alæ anticæ luteo subocellatæ, apice nigro quadrimaculatæ.

White. Palpi with brown tips. Antennæ testaceous. Proboscis tawny. Thorax with five luteous spots in front. Tips of the tarsi brown. Fore wings with luteous confluent streaks which include several more or less round and complete white spots; two subapical and two apical black spots. Length of the body 6 lines; of the wings 15 lines.

a, b. Shanghai, North China. From Mr. Fortune's collection.

Genus 142. CALLIMORPHA.

Palpi breves, subdescendentes, subpilosi; articuli longitudine subæquales, 1us longi-ovatus; 2us et 3us abbreviati; 3us obtusus. Maxillæ capite longiores. Antennæ setaceæ, *maris* subciliatæ. Alæ sat latæ; anticæ subtrigonæ, non subtruncatæ. Pedes mediocres; tibiæ breves, posticæ quadricalcaratæ.

Noctua, p., *Linn.; Berk.; Don.*
Setina, p., *Schr.*
Callimorpha, *Latr.*
Lithosia, p., *Haw.*

1. Callimorpha Jacobææ.

Nigra; alæ anticæ vitta maculisque duabus rubris; posticæ rubræ, nigro marginatæ.

Noctua Jacobææ, *Linn. Syst. Nat.* i. 839, 111; *It. Oel.* 120; *Faun. Suec. ed.* 2, 307, 1155. *Wien. Verz.* 68, *Fam.* C, 12. *Illig. N. Ausg. dcss.* i. 181, 12. *Geoffr. Hist. Ins.* ii. 146, 75. *Scop. Ent. Carn.* 207, 511. *Roes. Ins.* i. 2, 268, pl. 49, f. 1—6. *Schæff. Elem.* pl. 98, f. 3. *Sepp, Neederl. Ins.* ii. pl. 11, f. 1—9. *Wilkes, Nat. Hist.* 26, pl. 55. *Donov. Nat. Hist. Engl. Ins.* ii. pl. 45. *Esp. Schmett.* iv. 87, pl. 91, f. 6—8. *Panz. Faun. Germ.* 95, 22. *Pap. d'Eur.* vi. 54, pl. 222, f. 312. *Müll. Faun. Fridr.* 43, 380; *Zool. Dan.* 120, 1384. *Fuess. Schweiz Ins.* 37, 703; *Mag.* ii. 1, 20; *N. Mag.* ii. 60, 111. *Hufnagel, Pl. Berl. Mag.* iii. 2, 206, 6. *Schr. Faun. Boic.* ii. 1, 315, 1514. *Lang. Verz.* ii. 163, 1146, 1147. *Schwarz, Raup.* 396, 574. *Berk. Syn.* i. 139. *List. Goed.* (*Angl.*) 61, f. 54; (*Lat.*) 135, f. 54. *Albin, Nat. Hist. Engl. Ins.* pl. 34, f. 55, e—i. *Harr. Aur.* pl. 4, f. sup. *Reaum. Ins.* i. pl. 16, f. 4—7. *Mouff. Ins.* 97, fig. antep. *Goed. Ins.* i. pl. 9. *Rob. Ic.* i. pl. 20. *Blanck. Ins.* i. pl. G, K. *Pet. Gaz.* pl. 33, f. 6. *Ray, Ins.* 168, 26. *Merian, Ins. Eur.* iii. pl. 28. *Harr. Ins.* 8, pl. 4, f. super. *Ammiral,* pl. 3. *Edw. Glean.* pl. 271. *Poda, Ins.* 58, 17.

Bombyx Jacobææ, *Fabr. Sp. Ins.* ii. 195, 112; *Mant. Ins.* ii. 127, 160; *Ent. Syst.* iii. 1, 464, 181. *Gmel. ed. Syst. Nat.* i. 5, 2445, 111. *Oliv. Enc. Méth.* v. 86, 214. *Hübn. Bomb.* 129, 7, pl. 26, f. 112; *Larv. Lep.* iii. *Bomb.* 2. *Veræ,* G, a, f. 2, a—c. *Schæff. Icon.* pl. 47, f. 2, 3; *Nom. Panz.* 67. *Rossi, Faun. Etr.* ii. 175, 1095. *Nov. ed. Illig.* 279, 1095. *Vieweg, Tab. Verz.* i. 63, 67. *Borkh. Eur. Schmett.* iii. 262, 91. *Rhein. Mag.* i. 344, 186. *Stew. Elem.* ii. 159.

Setina Jacobææ, *Schr. Faun. Boic.* ii. 167, 16.

Lithosia Jacobææ, *Ochs. Schmett. Eur.* iii. 154, 18. *Haw. Lep. Brit.* 150.

Callimorpha Jacobææ, *Latr. Steph. Ill. Brit. Ent. Haust.* ii. 90, 1. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text,* 151, 46. *Croch. Règne Anim. Atlas, Ins.* pl. 153 bis, f. 7.

Euprepia Jacobææ, *Speyer, Isis.* 1843. *Zeller, Isis.* 1847, 15, 62; 433, 102. *Döring, Ent. Zeit. Stett.* ix. 1, 302.

Euchelia Jacobææ, *Duponch.*

Europe. Asia Minor.

a—d. England. From Mr. Stephens' collection.
e—h. England.
i, j. Europe. From M. Becker's collection

Genus 143. NUDARIA.

Antennæ setiformes, longiores, *maris* vix ciliatæ. Alæ deflexæ, lividæ, latiores, rotundatæ, semidiaphanæ, strigis transversis obscuri-oribus. *Fœminæ* masculos adæquantes. Larvæ subdiales, lichenivoræ, obscuræ.

Nudaria, *Haw. Lep. Brit.; Steph. Ill. Brit. Ent. Haust.* ii.; *Duponch.; Boisd.; Herr-Schæff.*
Callimorpha, p., *God.; Latr.*
Calligenea, *Duponch.*
Amalea, *Zett.*

1. Nudaria senex.

Testacea, linea limbalis in costa nigro punctata.

Bombyx senex, *Hübn. Bomb.* 118, 5, pl. 55, f. 236, 237.
Nudaria rotunda, *Haw. Lep. Brit.* 156.
Lithosia senex, *Ochs. Schmett.* iii. 163, 23.
Nudaria senex, *Steph. Ill. Brit. Ent. Haust.* ii. 84, 3, pl. 18, f. 2. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 161, 27. *Koch, Raup. und Schmett. Witterau, Isis*, 1848, 496.

a—d. England. From Mr. Stephens' collection.
e—h. England.

2. Nudaria mundana.

Pallida, iridescens; alæ anticæ strigis duabus transversis irregularibus, basali abbreviata, et umbra antelimbali fuscescentibus.

Phalæna Attacus mundana, *Linn. Syst. Nat.* i. 2, 812, 17. *Esp. Schmett.* iii. 45, pl. 6, f. 1, 2; 91, pl. 93; *Cont.* 14, f. 1—7. *Fuessl. Schweiz. Ins.* 33, 634. *Hufnagel, Berl. Mag.* iii. 3, 296, 45? *Naturf.* ix. 118, 45; xxiii. 147; xxviii. 37; xxix. 233, pl. 1, f. 1—5. *Schwarz, Raup.* 242.
Tortrix mundana, *Linn. Faun. Suec.* 349, 1343. *Deg. Ins.* ii. 1, 353, 9.
Bombyx munda, *Fabr. Ent. Syst.* iii. 1, 482, 236. *Schæff. Icon.* pl. 159, f. 6, 7. *Nomencl. Panz.* 148. *Borkh. Rhein. Mag.* i. 329, 156. *Schr. Faun. Boic.* ii. 1, 251, 1424. *Illig. N. Ausg. dess.* i. 70. *Wien. Verz.* 51.

Bombyx mundana, *Bork. Eur. Schmett.* iii. 269, 95.
Bombyx mundanus, *Schr. Faun. Boic.* ii. 1, 251, 1424.
Bombyx nuda, *Hübn. Bomb.* 118, 6, pl. 17, f. 63, 64.
Bombyx hemerobia, *Hübn. Bomb.* 118, 6, pl. 17, f. 65.
Lithosia mundana, *Ochs. Schmett. Eur.* iii. 160, 21.
Nudaria munda, *Steph. Ill. Brit. Ent. Haust.* ii. 84, 1.
Nudaria Hemerobia, *Steph. Ill. Brit. Ent. Haust.* ii. 84, 2.
Nudaria mundana, *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 162, 28. *A. et O. Speyer, Isis*, 1843, 189. *Koch, Raup. und Schmett. Witterau, Isis*, 1848, 499.

a—d. Europe. From M. Becker's collection.

3. Nudaria murina.

Cinereo-testacea, linea limbalis innotata, punctum in medio et dua in apice areolæ mediæ, series duæ punctorum in costis.

Bombyx murina, *Esp. Schmett.* iii. 491, pl. 88; *Cont.* 9. *Hübn. Beitr.* ii. 3, 66, 125, pl. 2, f. K, 8.
Bombyx vestita, *Hübn. Bomb.* 118, 4, pl. 17, f. 62.
Lithosia murina, *Ochs. Schmett.* iii. 162, 22.
Nudaria murina, *Herr-Schæff. Samml. Exot. Schmett.* ii. *Text*, 162, 29.

a—d. South France. From M. Becker's collection.

4. Nudaria cinerascens.

Cinerea, puncto medio et strigis duabus flexuosis obscurioribus; alæ posticæ pallidiores.

Nudaria cinerascens, *Herr-Schæff. Samml. Eur. Schmett.* ii. *Text*, 162, 30; *Suppl.* f. 143.

5. Nudaria mendica.

Testacea; alæ albido-hyalinæ, testaceo marginatæ, anticæ fasciis duabus obliquis macularibus pallide cinereis.

Pale testaceous. Wings whitish hyaline, with testaceous borders. Fore wings with two irregular oblique pale gray bands, composed of large spots, the second with a spot between it and the outer

border. Length of the body 3½—4 lines; of the wings 10—11 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.
b. United States.
c—f. Nova Scotia. From Lieut. Redman's collection.

Genus 144. RŒSELIA.

Alæ posticæ vena quinta nulla aut tertia brevissime furcata.

Rœselia, *Hübn. Verz. Schmett.*
Tinea, p., *Linn.; Fabr.; De Vill.*
Noctua, p., *Illig.*
Bombyx, p., *Esp.*
Pyralis, p., *Hübn.*
Nola, *Leach; Samouelle; Steph.; Curt.; Duponch.*
Hercyna, p., *Treit. Schmett. Eur.* viii. 179.

A. Alarum posticarum costa quarta e tertia.

1. RŒSELIA TOGATULALIS.

Alæ anticæ fuscæ, cinero adspersæ, striis lineisque nigris; arcu transverso media nigerrimo; posticæ dilute fuscæ.

Pyralis togatulalis, *Hübn. Pyral.* 7, 1, pl. 20, f. 130.
Hercyna togatulalis, *Treit. Schmett. Eur.* viii. 191, 11.
Nola togatulalis, *Duponch. Hist. Nat. Lép. France*, viii. 2, 271, pl. 228, f. 1.
Rœselia togatulalis, *Herr.-Schæff. Schmett. Eur.* ii. 163, 32.
France. Germany.

2. RŒSELIA STRIGULALIS.

Alæ anticæ cinereo-alboque variegatæ, tuberculis tribus versus marginem anticum, strigis duabus repandis subdenticulatis atris; posticæ fusco-albidæ.

Noctua strigula, *Wien. Verz.* 69, 2. *Illig. N. Ausg. dess.* i. 185, 2.
Bombyx strigula, *Esp Eur. Schmett.* iii. 52, pl. 89, f. 1, 2.
Pyralis strigulalis, *Hübn. Pyral.* 83, pl. 3, f. 16. *Freyer, Beitr.* ii. 35, pl. 12, f. 2.
Hercyna strigulalis, *Treit. Schmett. Eur.* viii. 187, 9.

Nola strigualis, *Steph. Ill. Brit. Ent. Haust.* iv. 62, 1. *Duponch. Hist. Nat. Lép. France*, viii. 2, 267, pl. 227, f. 4, 5.
Hercyna lineolalis, *Eversm.*
Rœselia strigulalis, *Herr-Schæff. Schmett. Eur.* ii. 163, 33; *Suppl.* f. 137.

Var. β. *Alæ anticæ fusco-cinerascentes, strigis duabus undulatis denticulatis nebulisque atris; posticæ fuscæ.*

Nola monachalis, *Steph. Ill. Brit. Ent. Haust.* iv. 62, 2.
a—d. England. From Mr. Stephens' collection.
e. England.
f, g. Frankfort. From M. Heminghoffen's collection.
h, i. Europe. From M. Becker's collection.

B. Alarum posticarum vena tertia simplex, quarta deest.

a. Cinerea, area prima fuscior.

3. RŒSELIA PALLIOLALIS.

Alæ anticæ albido-cinereæ aut fuliginosæ, basi striga maculaque costali nigricantibus; posticæ fuscæ.

——— —— *Roes. Ins.* 4, 24, pl. 11, f. 1—6.
Tinea cucullatella, *Linn. Syst. Nat.* i. 2, 889, 376; *Faun. Suec. ed.* 2, 1384. *Gmel. ed. Syst. Nat.* i. 5, 2594, 376. *De Vill. Ent. Linn.* ii. 467, 867. *Fabr. Sp. Ins.* ii. 296, 37; *Mant. Ins.* ii. 246, 61; *Ent. Syst.* iii. 2, 305, 8. *Fuessly, Schweiz. Ins.* 42, 830. *A. Magaz.* ii. 1, 39. *Gotze, Ent. Beytr.* iii. 4, 95, 376. *Schwarz, Raup. Kal.* 334, 331.
Noctua palliola, *Wien. Verz.* 69; *Fam.* D. 1. *Illig. N. Ausg. dess.* i. 185, 1.
Bombyx cucullata, *Borkh. Eur. Schmett.* iii. 474, 92, 93.
Bombyx cucullatella, *Esp. Schmett.* iii. 388, pl. 77, f. 4—9.
Phalæna cuculata, *Berl. Mag.* iv. 602, 60. *Naturforscher*, xi. 79, 60.
Pyralis palliolalis, *Hübn. Pyral.* 82, pl. 3, f. 13; pl. 23, f. 149. *Larv.* vi. *Pyral.* ii. *Pseudo-Lep.* xx. *Bomb.* A, a, f. 1, a—c.
Nola palliolalis, *Duponch. Hist. Nat. Lép. France*, viii. 2, 264, pl. 228, f. 3, 4.
Nola cucullatella, *Steph. Ill. Brit. Ent. Haust.* iv. 62, 3.
Hercyna palliolalis, *Treit. Schmett. Eur.* viii. 188, 10.
Rœselia palliolalis, *Herr-Schæff. Schmett. Eur.* ii. 164, 34.
Var. Nola fuliginalis, *Steph. Ill. Brit. Ent. Haust.* iv. 63.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g, h. Europe. From M. Becker's collection.

b. Area prima concolor.

* Linea posterior denticulata.

4. RŒSELIA CICATRICALIS.

Alæ anticæ albo-cinereæ, atomis lineisque repandis fuscis; posticæ dilute subcinereæ.

Hercyna cicatricalis, *Treit. Schmett. Eur.* x. 3, 39.
Rœselia cicatricalis, *Herr.-Schæff. Schmett. Eur.* ii. 164, 35, *Suppl.* f. 134—136.

Hungary.

5. RŒSELIA CENTONALIS.

Alæ anticæ margaritaceæ, basi fasciisque duabus aureis.

Pyralis centonalis, *Hübn. Pyral.* 8, 4, pl. 3, f. 15.
Hercyna centonalis, *Treit. Schmett. Eur.* viii. 193, 14.
Nola centonalis, *Duponch. Hist. Nat. Lép. France*, viii. 2, 275, pl. 228, f. 5.
Rœselia centonalis, *Herr-Schæff. Schmett. Eur.* ii. 164, 36, *Suppl.* f. 141, 142.

France. Germany. Russia.

6. RŒSELIA CONFUSALIS.

Nivea aut cinerea, striga posteriore valde flexuosa, punctis acutissimis nigris.

Nola cristulalis, *Duponch. Hist. Nat. Lép. France*, viii. 2, 269, pl. 227, f. 6, 7.
Rœselia confusalis, *Herr-Schæff. Schmett. Eur.* ii. 164, 37.

France. Germany.

** Linea posterior sinuata.

† Cinerea, linea undulata triarcuata basin versus vix nigrius adumbrata.

7. RŒSELIA ANCIPITALIS.

Rœselia ancipitalis, *Herr-Schæff. Eur. Schmett.* ii. 165, 38, *Suppl.* f. 132, 133.

Germany.

†† Alba, linea undulata triarcuata, alba, basin versus nigrius repleta.

8. RŒSELIA CRISTULALIS.

Umbra media linea posteriore omnino parallela; alæ posticæ maris *cinerascentes*, fœminæ *cinereo-fuscæ.*

Pyralis cristulalis, *Hübn. Pyral.* 8, 6, pl. 3, f. 17; *Larv. Lep.* vi. *Pyr.* ii. *Pseudo-Bomb.* f. 1, a, b.
Hercyna cristulalis, *Treit. Schmett. Eur.* viii. 192, 15.
Rœselia cristulalis, *Herr-Schæff. Eur. Schmett.* ii. 165, 39, *Suppl.* f. 138, 139.

a. Frankfort. From M. Heminghoffen's collection.

9. RŒSELIA CHLAMYDULALIS.

Alæ anticæ albidæ fusco nebulosæ, maris *margine externo ferrugineo nigroque marmoratæ*, fœminæ *angulo externo nigricante umbra media recta, cum linea posteriore biarcuata non parallela; alæ posticæ albæ*, maris *fascia media et limbo fuscescente*, fœminæ *cinereæ.*

Pyralis chlamitulalis, *Hübn. Pyral.* pl. 25, f. 160; pl. 28, f. 181.
Hercyna chlamydulalis, *Treit. Schmett. Eur.* x. 3, 41.
Nola chlamitulalis, *Duponch. Hist. Nat. Lép. France*, viii. 2, 77, pl. 228, f. 6.
Rœselia chlamitulalis, *Herr.-Schæff. Eur. Schmett.* ii. 165, 40.

Italy. Sicily.

††† Alba, linea undulata triarcuata limbum versus effusa, basin versus æqualiter fusco adumbrata.

10. RŒSELIA ALBULALIS.

Alæ albæ; anticæ fascia media margineque externo fuscis.

Pyralis albulalis, *Hübn. Pyral.* 8, 5, pl. 3, f. 14.
Noctua albula, *Wien. Verz.* 69, *Fam.* D, 3. *Illig. N. Ausg. dess.* i. 186, 3.
Hercyna albulalis, *Treit. Schmett. Eur.* viii. 191, 12.
Nola albulalis, *Duponch. Hist. Nat. Lép. France*, viii. 273, pl. 228, f. 2.
Rœselia albulalis, *Herr.-Schæff. Eur. Schmett.* ii. 166, 41, *Suppl.* f. 140.

France. Germany. Hungary.

LIST

OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

BY

FRANCIS WALKER, F.L.S.

PART III.—LEPIDOPTERA HETEROCERA.

PRINTED BY ORDER OF THE TRUSTEES.
LONDON, 1855.

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INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of the specimens of Lepidopterous Insects contained in the collection of the British Museum, indicating at the same time the peculiarities of each, as regards variations of character, locality, and the source from whence it has been derived. With this view, the different individuals of each species contained in the collection are indicated by the letters *a*, *b*, *c*, &c., following the name of the species and its synonymes, and the description, if it appeared to have been before undescribed.

The continuation is in hand, and will follow as soon as it is completed.

JOHN EDWARD GRAY.

British Museum,
May 14th, 1855.

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

PART III.

Tribe 6. BOMBYCITES.

Bombycina, *Stainton, Ins. Brit. Tineina*, 4.

The eleven following families, with the exception of the *Drepanulidæ*, form the *Lepidoptera Pomeridiana* of Stephens, which are thus characterized:—

"Palpi s pissime duo, breves, plerumque cylindrici. Maxillæ (aut proboscis) nullæ aut brevissimæ, submembranaceæ, non convolutæ.* Anteunæ, *maris* saltem, plus minusve ciliatæ vel pectinatæ, nonnunquam serratæ. Caput parvum. Thorax raro cristatus. Corpus sæpissime robustum, apice sæpe lanuginosum. Alæ elongatæ, trigonæ, plerumque deflexæ, indivisæ. Larva pedibus sexdecem, analibus nonnunquam spuriis."

Lepidoptera Pomeridiana, *Steph. Ill. Brit. Ent. Haust.* ii. 2.

With the *Lithosiidæ* and the tribe of *Noctuites* they form the *Noctuo-Bombycides* of Herrich-Schæffer. The *Lithosiidæ* are mentioned as a distinct family in the preceding part of this Catalogue, but are very closely allied to the *Arctiidæ*, and may be united with them and with the tribe of *Zygænides* in one extensive group, which will admit of several divisions. The great tribe of *Noctuites* may very generally be distinguished at first sight from the *Bombycites*, but are very little different from some of them in structure. Herrich-Schæffer distinguishes them from the *Liparidæ* by the ocelli, which are wanting in the latter family, and from the *Arctiidæ* by the costal vein of the hind wings appearing at the base of the wing.

* This character will not apply to several of the exotic genera.

Synopsis of Families.

A. Fœmina rarissime aptera. Larva libera.
A. Habitus sæpissime non geometriformis.
a. *Antennæ capitis latitudine multo longiores. Alæ anticæ aliter venosæ et infrenatæ, necnon majores ac posteriores.*
a. *Alæ anticæ vena marginis interioris unica.*
i. Frenulum conspicuum. Proboscis sæpissime plus minusve conspicua.
* Proboscis brevis, aut sat longa. Vena costalis alarum posticarum e areola media. 2. ARCTIIDÆ.
** Proboscis brevis aut brevissima. Vena costalis alarum posticarum e basi. - 3. LIPARIDÆ.
*** Proboscis sæpissime brevissima aut nulla.
† Alæ longiusculæ, non rotundatæ; vena 1a alarum posticarum in angulum ani excurrens. 5. NOTODONTIDÆ.
†† Alæ breviusculæ, rotundatæ; vena 1a alarum posticarum marginis interioris medium vix superat. - - - - 6. LIMACODIDÆ.
ii. Frenulum nullum Proboscis nulla.
* Venæ 4a et 5a alarum posticarum origine valde remotæ. - - - 8. SATURNIIDÆ.
** Venæ 4a et 5a alarum posticarum approximatæ.
† Vena 1a alarum anticarum basim versus furcata. 9. ENDROMIDÆ.
†† Vena 1a alarum anticarum basim versus simplex. 10. BOMBYCIDÆ.
b. *Alæ anticæ venis marginis interioris duabus.* 11. COSSIDÆ.
B. *Antennæ vix capitis latitudine longiores. Alarum omnium venæ forma, et fere magnitudine æquales.* 12. HEPIALIDÆ.
B. Habitus geometriformis. - - 7. DREPANULIDÆ.
B. Fœmina sæpissime aptera. Larva involucris sæpissime vitam degens. - - - - - - - 4. PSYCHIDÆ.

In the preceding characters the tribe of *Noctuites* are included with the *Liparidæ*, from which Herrich-Schæffer distinguishes them by their possessing ocelli. The same author mentions the want of ocelli in the *Lithosiidæ*, as the difference between them and the *Arctiidæ*.

Fam. 2. ARCTIIDÆ.

Statura robusta. Ocelli conspicui. Maxillæ breves, submembranaceæ, nonnunquam obsoletæ. Antennæ mediocres, *fœminæ* obsoletius, bipectinatæ, vel ciliatæ, nonnunquam serratæ, aut simplices. Palpi duo, parvi, pilosi, plerumque triarticulati, raro nulli. Abdomen crassum, maculatum. Alæ integræ, deflexæ, conciune depictæ. Frenulum conspicuum. Vena 1a alarum posticarum in angulum ani excurrens; 5a 4a multo propior quam 6a; 6a et 7a angulo antico areolæ mediæ, approximatæ, e puncto aut ramo communi; 8a e areola media. Volatus sæpius gravis, nocturnus. Larva sæpius solitaris, pilis fasciculatis dense vestita, polyphaga, lubricipes, sæpius plantas humiles pascens. Pupa folliculata.

Chelonides, p., *Boisd.*; *Herr.-Schæff.*
Chelonarii, p., *Boisd.* olim.
Fam. Arctiidæ. Sub-fam. Chelonidi, *Steph. Cat. Brit. Lep.*
Arctiidæ, p., *Leach*; *Steph. Ill. Brit. Ent. Haust.* ii. 54.
Eyprepia, p., *Ochs. Schmett. von Eur.* iii. 299.
Phalænina Arctiites, *Newman*, *Ent. Mag.* ii. 382.
Arctia, *Schr.*
Arctia et Callimorpha, *Latr.*

Synopsis of Genera.

A. *Tibiæ posticæ bicalcaratæ. Fœm.* Alæ abortivæ. 1. Trichosoma.
B. *Tibiæ posticæ sæpissime quadricalcaratæ. Fœm.* Alæ completæ.
A. Tibiæ anticæ calcare forti inflexo.
a. Antennæ simplices, *maris* vix serratæ. - 2. Euprepia.
b. Antennæ *maris* extus pectinatæ, intus serratæ; *fœminæ* serratæ.
a. Alæ unicolores. - - - - - 3. Estigmene.
b. Alæ variegatæ. - - - - - 11. Phaos.
c. Antennæ *maris* bipectinatæ. - - - 49. Theaga.
B. Tibiæ anticæ inermes.
a. *Caput et thoracx pilis longis vestita.*
a. Antennæ *maris* et *fœminæ* pectinatæ.
i. Proboscis sat longa.
* Palporum articulus 3us sat longus.
† Antennæ corporis dimidio non longiores.
‡ Palpi porrecti. - - - 40. Ambles.
‡‡ Palpi ascendentes. - - 41. Baritius.
†† Antennæ corporis dimidio multo longiores. 51. Amastus.

** Palporum articulus 3us brevissimus.
† Alæ anticæ venis inferioribus 3a et 4a non remotis.
14. MAZÆRAS.
†† Alæ anticæ venis inferioribus 3a et 4a remotis.
‡ Tibiæ posticæ calcaribus longis.
§ Palpi longiusculi. - - 42. ELYSIUS.
§§ Palpi breviusculi. - 35. ANTHEUA.
‡‡ Tibiæ posticæ calcaribus parvis.
§ Pedes breviusculi. - - 46. PURIUS.
§§ Pedes longiusculi. - - 45. BITURIX.
ii. Proboscis brevis.
* Alæ totæ opacæ.
† Tibiæ posticæ calcaribus quatuor longis.
7. AEOPE.
†† Tibiæ posticæ calcaribus quatuor parvis.
67. SARAPUS.
††† Tibiæ posticæ calcaribus apicalibus parvis.
61. SCIATHOS.
b. Antennæ *maris* pectinatæ, *fœminæ* serratæ aut simplices.
i. Thorax fasciculis lateralibus longissimis.
28. NUMENES.
ii. Thorax non fasciculatus.
* Palporum articulus 3us non lanceolatus.
† Palporum articulus 3us non globosus nec cylindricus.
‡ Proboscis brevis.
§ Alæ discolores.
× Alæ rotundatæ, - - 4. ARCTIA.
×× Alæ subangulatæ. - 9. AMMALO.
§§ Alæ concolores.
× Alæ opacæ, dense squamosæ.
0 Alæ posticæ non dilatatæ.
— Thorax vix dense hirtus.
. Tibiæ quadricalcaratæ.
+ Palpi breves.
++ Tibiæ posticæ calcaribus breviusculis.
29. SPILOSOMA.
++++ Tibiæ posticæ calcaribus longiusculis.
38. ARDICES.
+++ Palpi longiusculi. - - 33. LACYDES.
. . Tibiæ bicalcaratæ. - 31. ALPHÆA.
= Thorax densissime hirtus. - - 44. PARACLES.
00 Alæ posticæ antice dilatatæ.
— Alæ posticæ margine postico non undulato.
48. AMAXIA.

= Alæ posticæ margine postico undulato. 16. Glanycus.
×× Alæ subdiaphanæ, maculis rarioribus adspersæ. - 30. Cyenia.
××× Alæ nudæ, maculis squamosis. 59. Ambryllis.

‡‡ Proboscis longiuscula.
§ Palpi capite longiores.
× Abdomen alas superans. 53. Opharus.
×× Abdomen alas non superans. 50. Agrisius.
§§ Palpi capite non longiores.
× Alæ hirtæ, opacæ.
0 Alæ longiusculæ.
— Palporum articulus 3us longiusculus. - - - 54. Carales.
= Palporum articulus 3us brevissimus. - - 55. Halesidota.
. Alæ *maris* anticæ subtus fasciculatæ. - 39. Neritos.
.. Alæ anticæ subtus non fasciculatæ. - - 58. Onythes.
o0 Alæ latiusculæ.
— Palpi ascendentes. 8. Tinolius.
= Palpi porrecti. - 62. Ovios.
000 Alæ sat angustæ, non longæ. 43. Malabus.
×× Alæ fere nudæ, semihyalinæ. 47. Aphylle.
†† Palporum articulus 3us globosus.
‡ Corpus gracile. - - 10. Nemeophila.
‡‡ Corpus crassum. - - - - 68. Pinara.
††† Palporum articulus 3us cylindricus.
‡ Proboscis brevis. - - - 17. Diacrisia.
‡‡ Proboscis sat longus.
§ Tibiæ posticæ calcaribus longis. 63. Egybolia.
§§ Tibiæ posticæ calcaribus apicalibus parvis. 65. Are.
** Palporum articulus 3us lanceolatus. 64. Apina.

c. Antennæ simplices, ciliatæ.
i. Alæ mediocres.
* Abdomen alas posticas non superans.
† Alæ anticæ costa recta. - 12. Phragmatobia.
†† Alæ anticæ costa convexa. - 66. Ammatho.
** Abdomen alas posticas paullo superans. 15. Gippius.

ii. Alæ longiusculæ.
* Alæ posticæ breves. - - 36. Ecpantheria.
** Alæ posticæ sat longæ.
iii. Alæ latæ.
* Antennæ subtus subpubescentes. - 27. Amana.
** Antennæ subtus obtuse serratæ.
† Alæ angulatæ. - - - 26. Thalaina.
†† Alæ rotundatæ.
‡ Abdomen alas non superans. 60. Anaphela.
‡‡ Abdomen alas superans. - 34. Alpenus.

B. *Caput et thorax squamis appressis.*
a. Palpi capite non longiores.
i. Antennæ simplices.
*. Palpi non clavati.
† Palpi et femora squamis appressis, illi adscendentes. Tibiæ anticæ femoribus multo breviores.
‡ Abdomen alas posticas non superans. 24. Hypercompa.
‡‡ Abdomen alas posticas superans.
§ Palpi brevissimi.
× Proboscis longiuscula. 18. Creatonotos.
×× Proboscis brevis. - 32. Amphissa.
§§ Palpi breves. - - - 37. Aloa.
§§§ Palpi mediocriter longi. - 23. Idalus.
§§§§ Palpi longiusculi. - - 21. Soaptius.
† Palpi et femora hirsuta, illi porrecti. Femora et tibiæ antica æquilonga.
‡ Antennæ corporis dimidio non longiores. 5. Pericallia.
‡‡ Antennæ corporis dimidio multo longiores. 52. Amerila.
** Palpi clavati. - - - - 56. Canopus.
ii. Antennæ *maris* breviter pectinatæ, *fœminæ* serratæ. 25. Areas.
iii. Antennæ pectinatæ.
* Abdomen alas posticas non superans. 6. Daritis.
** Abdomen alas posticas superans.
† Alæ latæ. - - - - 13. Apantesis.
†† Alæ angustæ.
‡ Tibiæ posticæ calcaribus sat longis. 20. Arara.
‡‡ Tibiæ posticæ calcaribus minimis. 19. Evius.
b. Palpi capite longiores. - - - - 57. Anaxita.

Genus 1. TRICHOSOMA.

Statura robustior. Palpi hirsuti. Proboscis distincta. Antennæ *maris* pectinatæ, *fœminæ* ciliatæ. Alæ *fœminæ* spuriæ. Volatus *maris* meridianus. Larva subgregaria. Pupa brevis, segmentis immobilibus.

Trichosoma, *Ramb. Ann. Soc. Ent. Fr.* i. 272; *Boisd.*; *Herr.-Schæff.*
Eyprepia, p., *Ochs.*; *Treits.*
Bombyx, p., *Esper*; *Hübn.*; *Freyer.*
Arctia, p., *Hübn.*; *Meig.*
Chelonia, p., *God.*

This genus and *Oryyia* seem to connect the *Arctiidæ* with the *Liparidæ*.

Europe.

A. Cinereum. - - - - - - - - parasitum, *Esper*.
B. Nigrum.
A. Alæ anticæ strigis anastomosantibus carneis; posticæ flavæ, maculis nigris. - - - - - - Corsicum, *Ramb*.
B. Alæ quatuor strigis anastomosantibus albis. Bœticum, *Ramb*.
C. Fuscum. - - - - - - - - Pierreti, *Boisd*.

1. TRICHOSOMA PARASITUM.

Cinereum; alæ anticæ maculis elongatis nigris.

Bombyx parasita, *Esper*, *Schmett.* iii. *Cont.* 12, pl. 92, f. 1, 7. *Hübn. Bomb.* pl. 33, f. 146; pl. 53, f. 228; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K. f. fig. 2.
Eyprepia parasita, *Ochs. Schmett. Eur.* iii. 345, 23.
Chelonia parasita, *God. Pap. de France*, iv. 347, 107, pl. 36, f. 1, 2. *Boisd. Ind. Meth.* 43.
Trichosoma parasitum, *Boisd. Icon. Hist. Lépid.* 121, 2, pl. 60, f. 5, 6 *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, *Suppl.* 141, 1.
Arctia parasita, *Hübn. Verz. Schmett.* 183, 1883. *Meig. Syst. Beschr. Eur. Schmett.* iii. 34, 16, pl. 85, f. 3.
Bombyx (Eyprepia) parasita, *Freyer*, *Neuere Beitr. Schmett.* iii. 5, pl. 194.
Trichosoma parasita, *Speyer*, *Ent. Zeit. Stett.* xiii. 315, 25.

Hungary. Valesia.

a, *b*. Europe. From M. Becker's collection.

2. Trichosoma Corsicum.

Mas. *Alæ anticæ nigræ, rivulis fulvo-roseis; posticæ fulvæ, nigro maculatæ.* Fœmina, *vix hemiptera; alæ ochraceæ, fusco maculatæ.*

Trichosoma Corsicum, *Ramb. Ann. Soc. Ent. Fr.* i. 272, pl. 8, f. 6. *Boisd. Icon. Hist. Lépid.* 119, 1, pl. 60, f. 7, 9. *Duponch. Treitsch. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 141, 3.

Bombyx Corsica, *Freyer, Neuere Beitr. Schmett.* ii. 87, pl. 146, f. 3.

a—d. Corsica. From M. Becker's collection.

3. Trichosoma Bœticum.

Mas. *Alæ nigræ, rivulis maculisque albo-rufescentibus.* Fœmina *aptera.*

Trichosoma Bœticum, *Ramb. Ann. Soc. Ent. Fr.* v. 587, pl. 17 A. f. 1—4. *Boisd. Duponch. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 141, 2.

Bombyx Bœtica, *Freyer, Neuere Beitr. Schmett.* iv. 41, pl. 313, f. 4.

a, b. South Spain. From M. Becker's collection.

4. Trichosoma Pierreti.

Nigro-fuscum; alæ brevissimæ, fuscæ; femora antica fulva.

——— ——— *Carreno, Ann. Soc. Ent. Fr.* x. 205.

Trichosoma Pierreti, *Boisd. Ann. Soc. Ent. Fr.* x. *Bull. Ent.* xxviii.

South Europe.

Africa.

5. Trichosoma mauritanicum.

Alæ anticæ supra subtusque nigro-fuscæ, ad margines extus maculis duabus albido-flavescentibus ornatæ; alæ posticæ supra subtusque et angulo ani flavo aurantiacis (hoc fortiter fusco-nigro marginato), macula trigona fuscaque ornatis; caput et thorax nigra, flavescente pilosa; abdomen supra nigrum, subtus piloso flavescens; antennæ sat elongatæ, flavescentes, setis nigris.

Trichosoma mauritanicum, *Lucas, Explor. Scient. de l'Alger. Anim. Artic.* iii. 376, 81, pl. 3, f. 5.

Algeria.

6. Trichosoma algiricum.

Mas. *Flavescente fimbriatum; caput, thorax et abdomen nigra, flavescente pilosa; antennæ flavescentes, fortiter pectinatæ; alæ anticæ supra nigro subflavescente tinctæ, flavo transversim trajectæ, puncto flavescente ad apicem ornatæ, subtus flavæ, antice nigrescentes; alæ posticæ flavæ, vitta marginali lata nigrescente.*

Trichosoma algiricum, *Lucas, Explor. Scient. de l'Alger. Anim. Artic.* iii. 376, 82, pl. 3, f. 6.

Algeria.

Asia.

7. Trichosoma Löwii.

Fœm. *Nigrum; coxis anticis extus femoribusque omnibus supra coccineis; alæ brevissimæ rotundatæ, anticæ atræ postice carneæ, posticæ roseæ.* Long. 8—9 lin.

Trichosoma Löwii, *Zeller, Ent. Zeit. Stettin.* vii. 9.

Asia Minor.

Genus 2. EUPREPIA.

Antennæ simplices, *maris* vix serratæ. Tibiæ anticæ calcare forti inflexo; posticæ quadricalcaratæ. Alæ *fœminæ* completæ.

Bombyx, p., *Fabr.; Borkh.; Esp.; Hübn.*
Noctua, p., *De Vill.*
Eyprepia, p., *Ochs.*
Euprepia, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 141.

Europe.

1. Euprepia pudica.

Rosea; caput, thoracis maculæ tres et alarum maculæ angulato-irregulares nigra; abdomen purpureum, seriebus tribus macularum nigrarum.

Phalæna pudica, *Gmel. ed. Syst. Nat.* i. 24, 19, 516.
Bombyx pudica, *Fabr. Mant. Ins.* ii. 129, 173. *Ent. Syst.* iii. 1, 471, 197. *Oliv. Enc. Méth.* v. 92, 229. *Borkh. Eur. Schmett.* iii. 234, 472, 73. *Esp. Schmett.* iii. 177, pl. 33, f. 1; *Cont.* 6, 26, pl. 84, f. 1, 48. *Hübn. Bomb.* 134, 6, pl. 31, f. 134; *Beitr.* ii. 81, 4, 1, pl. f. G. 1, 2.

Chelonia pudica, *God. Pap. de France*, iv. 313, pl. 32, f. 1, 2. *Petagna.*

——— ——— *Ernst, Pap. d'Eur.* iv. 133, pl. 148, f. 193.

Noctua tessellata, *De Vill. Ent. Linn.* ii. 274, 374, pl. 5, f. 18.

Arctia pudica, *Latr. Gen. Crust. et Ins.*

Callimorpha pudica, *Meig. Handb.* 143, 100; *Syst. Beschr. Eur. Schmett.* iii. 4, 2, 6, pl. 83, f. 6.

Eyprepia pudica, *Ochs. Schmett. Eur.* iii. 334, 17; iv. 61, 18.

Euprepia pudica, *Hübn. Verz. Schmett.* 181, 1863. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 141. *Ramb. Faun. Cors. Costa, Faun.*

a, *b*. Europe. From M. Becker's collection.
c, *d*. Europe. From Mr. Milne's collection.

Siberia.

2. Euprepia? funerea.

Atra, ciliis concoloribus; abdomen ochraceo cingulatum.

Euprepia funerea, *Eversm, Bull. Soc. Imp. Nat. Mosc.* 1847, 3, 77, 12, pl. 5, f. 5.

Eastern Siberia.

Mexico.

3. Euprepia docta.

Alba; caput et thorax pallide testacea, illum subtus fuscum; thorax fusco trivittatus; abdomen rufum, apice fuscum, subtus flavum fusco marginatum; alæ anticæ fasciis quatuor macularibus fuscis, posticæ margine interno rufo.

Var. a. White. Head and thorax palè testaceous. Head brown beneath. Palpi and antennæ black. Thorax with three broad brown stripes. Abdomen red, with a brown tip; under side brown, with a yellow disk. Fore wings with ten brown spots, which form four imperfect bands. Hind wings red along the inner border. Length of the body 6—8 lines; of the wings 16—18 lines. *Var. β*, like *Var. a.* Hind part of the abdomen with a brown stripe. Spots on the fore wings larger, and accompanied by three elongated dots. *Var. γ*, like *Var. β.* Stripe of the abdomen longer. Spots on the fore wings still larger. Hind wings with brown spots along the hind border.

a. Guatimala. From M. Sallé's collection.
b. Mexico. From M. Hartweg's collection.
c. ———? Presented by E. Doubleday, Esq.

Genus 3. ESTIGMENE.

Antennæ *maris* extus pectinatæ, intus serratæ; *fœminæ* serratæ. Tibiæ anticæ calcare forti inflexo; posticæ quadricalcaratæ.

Bombyx, p., *Fabr.*; *Schr.*; *Borkh.*; *Esp.*; *Panz.*; *Goëze*; *Brahm.*; *Schwarz*; *Illig.*; *Vieweg*; *Hübn.*; *Treits.*
Eyprepia, p., *Ochs.*
Chelonia, p., *God.*
Arctia, p., *Boisd.*
Estigmene, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 142.

1. Estigmene luctifera.

Nigra; abdomen et alarum posticarum angulus analis flava, illum serie triplici punctorum nigrorum.

Phalæna Bombyx lentifera, *Gmel. ed Syst. Nat.* i. 5, 2424, 533.
——— ——— *Ernst, Pap. d'Eur.* iv. 168, pl. 159, f. 206, *a—d.*; pl. 160, f. 206, *e—g.*
Bombyx luctifera, *Fabr. Mant. Ins.* ii. 123, 132; *Ent. Syst.* iii. 1, 453, 143. *Oliv. Enc. Méth.* v. 77, 180. *Wien. Verz.* 54, f. 4. *Illig. N. Ausg. Dess.* 1, 94, 4. *Hübn. Bomb.* 138, 1, pl. 34, f. 147. *Borkh. Schmett.* iii. 232, 72; *Rhein. Mag.* i. 343, 184. *Vieweg*, 61, 63, pl. *Verg.* 1, H. *Brahm, Ins. Kal.* 273, 162. *Esp. Schmett.* iii. 222, pl. 43, f. 1—5. *Panz. Faun. Germ.* 9, 17.. *Schwarz, Baup.* 574, 677, 757. *Kleem. Beitr.* 249, pl. 30, f. 1—5. *Treits. Hülfsb. Schmett.* 226, 107.
Bombyx cæsaria, *Göeze, Entom. Beytr.* iii. 3, 63, 93.
Bombyx Morio, *Schr. Faun. Boic.* ii. 1, 250, 1423.
Arctia luctifera, *Latr. Gen. Crust. et Ins. Meig. Handb.* 144, 104; *Syst. Beschr. Eur. Schmett.* iii. 35, 17, pl. 85, f. 5. *Boisd.*
Eyprepia luctifera, *Ochs. Schmett. Eur.* iii. 349, 25; iv. 61, 26.
Euprepia luctifera, *Döring, Ent. Zeit. Stett.* ix. 304, 13.
Chelonia luctifera, *God. Pap. de France*, iv. 354, 110, pl. 36, f. 5.
Estigmene luctifera, *Hübn. Verz. Schmett.* 184, 1898. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 142. *Speyer, Ent. Zeit. Stett.* xiii. 315, 23.

South France. Switzerland. Austria.

a. Nice. From Dr. Leach's collection.
b. Europe. From Mr. Milne's collection.
c, d. Europe. From M. Becker's collection.

Genus 4. ARCTIA.

Statura robusta. Caput et thorax pilis longis hirta. Proboscis brevissima. Palpi porrecti, breves, pilosissimi; articulus 1us 2o longior; 3us subacutus. Antennæ graciles, sat longæ. Thorax haud cristatus. Abdomen annulatum, robustum. *Mas.* — Antennæ pectinatæ. *Fœm.* — Antennæ serratæ, nonnunquam pectinatæ. Tibiæ posticæ quadricalcaratæ; anticæ inermes. Alæ anticæ rivulosæ vel maculatæ, discolores, luteo vel rubro, maculatæ; posticæ vena 5a conspicua. *Fœminæ mares* adæquantes vel superantes. Volatus nocturnus. Larvæ solitares.

Arctia, p., *Schr.*; *Latr.* (olim); *Steph.*
Eyprepia, p., *Ochs.*
Chelonia, p., *Latr.*; *God.*; *Boisd. Gen. et Ind. Méth.* 63; *Herr.-Schæff.*

Synopsis of Species.

Europe.

A. Alæ pallidæ, maculis nigris irregularibus, anticæ quatuor costalibus subtransversis.
  A. Alæ anticæ carneo subcinereæ. - - Zoraida, *Grasl.*
  B. Alæ anticæ fusco-rufæ. - - - hemigena, *Grasl.*
B. Alæ anticæ hepaticæ, posticæ purpureæ, omnes nigro irregulariter maculatæ.
  A. Maculæ alarum anticarum limbales duæ aut tres.
    honesta, *Frey.*
  B. Maculæ alarum anticarum limbales nullæ.
    A. Antennæ latiores. - - - - maculosa, *Gmel.*
    B. Antennæ angustiores. - - - Simplonica, *Anderr.*
C. Alæ anticæ nigræ, costis omnibus et strigis transversis reticulatim conjunctis pallidis.
  A. Carnea, nigro varia. - - - - Dahurica, *Boisd.*
  B. Nigra, albido varia. - - - - Quenselii, *Payk.*
D. Alæ anticæ fuscæ aut nigræ, fasciis transversis aut maculis albidis.
  A. Alæ anticæ fasciis plus minusve interruptis transversis.
    A. Abdominis maculæ dorsales nigræ anum versus dilatatæ; anus omnino niger.
      a. Alæ posticæ roseo-purpureæ.
        i. Minor. Alæ anticæ unifasciatæ. - Latreillii, *God.*
        ii. Media. Alæ anticæ bifasciatæ. - - casta, *Fabr.*
        iii. Major. Alæ anticæ fasciis niveis fulvo-cinctis.
          Hebe, *Linn.*

b. Alæ posticæ flavæ.
i. Alæ posticæ limbum versus coccineæ. fasciata, *Esp.*
ii. Alæ anticæ limbo et margine interiore cruce et striga prope basim albis. - - - - Flavia, *Cram.*
B. Abdominis maculæ dorsales nigræ, anum versus minores; anus innotatus.
a. Fusca. Alæ posticæ cinnabarinæ, cæruleo maculatæ. Caja, *Linn.*
b. Nigra. Alæ anticæ fasciis macularibus albis; posticæ rubræ, basi fasciaque nigris. - - Thulea, *Dalm.*
c. Cinnamomea. Alæ anticæ maculis laceratis citrinis, nigro-cinctis; posticæ aurantiacæ, maculis nigris. Lapponica, *Thunb.*
B. Alæ anticæ maculis rotundatis separatis.
A. Alæ anticæ nigræ, maculis albis. - - villica, *Linn.*
B. Alæ anticæ ferrugineæ, maculis flavis.
a. Alæ posticæ aurantiacæ. - - - aulica, *Linn.*
b. Alæ posticæ flavæ, limbum versus coccineæ.
i. Alæ posticæ maculis 3 nigris. - curialis, *Borkh.*
ii. Alæ posticæ maculis 6—7 nigris. - Dejeanii, *God.*
E. Alæ anticæ flavæ. - - - - - purpurea, *Linn.*

1. Arctia Zoraida.

Alæ anticæ carneo-subcinereæ, ad apicem paululum imbutiores maculis quatuor apicalibus nigris transversis, 1a sinuata, 2a oblonga cæteris majore, 3a Y similis situ inverso, 4a fere quadrata, maculis duabus posticis concoloribus, externa punctiformi; posticæ paululum dilutiores, subdiaphanæ, lunula centrali nigricante, maculisque tribus marginalibus pyriformibus concoloribus; thorax villosus, castaneo-fuscus.

Chelonea Zoraida, *Graslin, Ann. Soc: Ent. Fr.* v. 561, pl. 17, B. f. 3. *Duponch. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 144, 15, 1.

Granada.

2. Arctia hemigena.

Alæ fusco-rufæ, apice subroseæ; anticæ apice maculis quatuor nigris transversis, duabus non longe a corpore oblongis coadunatis, 3a sinuosa producta sursum dilatata, 4a 3a subsimili sed minore; maculis quoque in infima parte tribus nigris,

parvis ferè rotundis, intermedia majore; posticæ paululum dilutiores, subdiaphanæ, lunula centrali nigricante, maculis duabus seu aliquando tribus parvis concoloribus majoribus; thorax villosus castaneo-fuscus, pilis subcinereo-carneis circumdatus; antennæ pectinatæ, angustiores. Fœminæ *semiaptera. Larva nigra.*

Chelonia hemigena, *Graslin, Ann. Soc. Ent. Fr. 2me Sér.* viii. 3, pl. 10, f. 9—11.

South Spain.

3. Arctia honesta.

Abdomen obscure roseum, nigro maculatum; alæ anticæ rufoflavæ, maculis nigris albido cinctis plerumque triangularibus; posticæ obscure roseæ, maculis nigris.

Euprepia honesta, *Freyer, Neue Beitr. Schmett.* 96, pl. 344, f. 2; *Ent. Zeit. Stett.* ii. 91. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 145, 17, 3.

Germany.

4. Arctia maculosa.

Fusca; thorax nigro maculatus; alæ anticæ nigro maculatæ, posticæ roseæ, fusco maculatæ.

Bombyx maculosa, *Fabr. Mant. Ins.* ii. 129, 174; *Ent. Syst.* iii. 1, 471, 199. *Oliv. Enc. Méth.* v. 93, 231. *Esp. Schmett.* iii. 179, pl. 33, f. 4, 5. *Illig. N. Ausg. Dess.* i. 87, 10. *Knoch, Beitr.* iii. 100, pl. 5, f. 2. *Borkh. Eur. Schmett.* iii. 196, 59. *Rhein. Mag.* i. 340, 177. *Lang. Verz.* ii. 92, 714, 715. *Brahm, Ins. Kal.* 199, 102. *Hübn. Bomb.* 137, 16, pl. 33, f. 144, 145; *Larv. Lep.* iv. *Bomb.* ii. *Veræ K.* f. 1, 2. *Wien. Verz.* 54. Fam. E. 10. *Petagona. Treits. Hulfsb. Schmett.* 225, 105.

Phalæna maculosa, *Gmel. ed. Syst. Nat.* i. 5, 2419, 518.

——— ———, *Ernst, Pap. d'Eur.* iv. 148, pl. 154, f. 199, a—h.

Arctia maculosa, *Schr. Faun. Boic.* ii. 2, 153, 10. *Huln. Verz. Schmett.* 186, 1831. *Meig. Handb.* 143, 102. *Syst. Beschr. Eur. Schmett.* iii. 34, 15, pl. 85, f. 2.

Eyprepia maculosa, *Ochs. Schmett. Eur.* iii. 343, 22; iv. 61, 23. *Boisd.*

Chelonia maculosa, *God. Pap. de France*, iv. 349, 108, pl. 36, f. 3.

Bombyx (Eyprepia) maculosa, *Freyer, Neuere Beitr.* 95, pl. 344, f. 1; *Ent. Zeit. Stett.* ii. 91.

Chelonia maculosa, *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 145, 18, 4. *Speyer, Ent. Zeit. Stett.* xiii. 314, 17.
Var. Chelonia Chardinyi, *Duponch.*

Pyrenees. Hungary. Russia.

a—d. Europe. From M. Becker's collection.

5. Arctia Simplonica.

A. maculosæ *affinis; antennæ multo graciliores; alæ anticæ cinereæ, maculis elongatis nigris; posticæ roseæ, fascia basali obsoleta, macula centrali margineque latiore nigris.*

Chelonia Simplonica, *Anderregg. Boisd. Gen. et Ind. Méth. Eur. Lép.* 64, 527.

Bombyx (Eyprepia), *Freyer, Neuere Beitr. Schmett.* v. 16, 679, pl. 392, f. 3—5.

Valais.

6. Arctia Dahurica.

Carnea; occiput, strigæ tres corporis, maculæque numerosæ intercostales alarum anticarum nigra; alæ posticæ croceæ, basi et ciliis flavis, maculis nigris.

Chelonia Dahurica, *Boisd. Icon. Hist. Lépid.* 126, 2, pl. 60, f. 1. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 145, 19, 5.

Siberia. California.

7. Arctia Quenselii.

Nigra; corporis strigis longitudinalibus, alarum ciliis, anticarum costis, posticarum arcubus albis; anticarum strigis transversis anastomosantibus flavis.

Bombyx Quenselii, *Payk.*
Bombyx strigosa, *Fabr.*
Chelonia Quenselii, *Zett. Ins. Lapp.* 930, 5. *Duponch. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 145, 20, 6. *Speyer, Ent. Zeit. Stett.* xiii. 287, 10.

Norway. Lapland. Tyrol.

8. Arctia Latreillii.

Minor; alæ anticæ fascia pone basim cruce juncta.

Chelonia Latreillii, *God. Pap. de France*, iv. 318, 97, pl. 33, f. 1. *Boisd. Icon. Hist. Lépid.* 124, 1, pl. 59, f. 5. *Duponch. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 146, 21, 7. *Graells, Ann. Soc. Ent. Fr. 2me Sér.* i. 359, pl. 12, No. 2.

Arctia Latreillii, *Meig. Syst. Beschr. Eur. Schmett.* iii. 30, 7, pl. 83, f. 5.

Bombyx (Eyprepia) Latreillii, *Freyer, Neuere Beitr. Schmett.* v. 58, 732, pl. 418, f. 2.

Catalonia.

9. Arctia casta.

Media; alæ anticæ fascia pone basim lata, altera pone medium, ramum versus angulum ani emittente.

Bombyx casta, *Fabr. Mant. Ins.* ii. 129, 74; *Ent. Syst.* iii. 1, 471, 198. *Oliv. Enc. Méth.* v. 92, 230. *Esp. Schmett.* iii. 177, pl. 33, f. 2. *Cont.* 12, 77, pl. 92, f. 8—12. *Borkh. Eur. Schmett.* iii. 177, 51. *Wien. Schmett.* 59, 10. *Knoch, Beitr.* iii. pl. 5, f. 2. *Hübn. Bomb.* 135, 7, pl. 31, f. 137; pl. 51, f. 219. *Treits. Hulfsb. Schmett.* 225, 104. *Petagna.*

Eucharia casta, *Hübn. Verz. Schmett.* 181, 1866.

Eyprepia casta, *Ochs. Schmett. Eur.* iii. 341, 21; iv. 61, 22.

Phalæna casta, *Gmel. ed. Syst. Nat.* i. 5, 2419, 5, 17.

Chelonia casta, *God. Pap. de France*, iv. 316, 96, pl. 32, f. 3, 4. *Boisd. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 146, 22, 8. *Speyer, Ent. Zeit. Stett.* xiii. 313, 16.

Arctia casta, *Meig. Handb.* 143, 101; *Syst. Beschr. Eur. Schmett.* iii. 30, 8, pl. 83, f. 7.

Bombyx (Eyprepia) casta, *Freyer, Neuere Beitr. Schmett.* ii. 79, pl. 141.

a—c. Europe.

10. Arctia Hebe.

Major; alæ anticæ atræ, fasciis niveis fulvo-cinctis quinque, ambabus posterioribus in literam H *junctis; posticæ sanguineæ, atro maculatæ.*

Arctia Hebe, *Schr. Faun. Boic.* ii. 2, 152, 2. *Latr. Gen. Crust. et Ins. Meig. Handb.* 142, 98, pl. 11, f. 2; *Syst. Beschr. Eur. Schmett.* iii. 28, 4, pl. 84, f. 1. *Steph. Ill. Brit. Ent. Haust.* ii. 71, 4. *Wood, Ind. Ent.* pl. 54, f. 30.

Phalæna Bombyx Hebe, *Linn. Syst. Nat.* ii. 820, 40. *Gmel. ed. Syst. Nat.* i. 5, 2420, 40.

Bombyx Hebe, *Fabr. Sp. Ins.* ii. 197, 119; *Mant. Ins.* ii. 128, 169; *Ent. Syst.* iii. 1, 469, 193. *Oliv. Enc. Méth.* v. 90,

224. *Schæff. Icon. Nomencl. Panz.* 40, pl. 28, f. 1, 2. *Esp. Schmett.* iii. 181, pl. 34, f. 1—4. *Panz. Faun. Ins. Germ.* 16, 24. *Borkh. Eur. Schmett.* iii. 172, 49; *Rhein. Mag.* i. 337, 170. *Fuessl. N. Mag.* iii. 2, 145, 14. *Vieweg. Tab. Verz.* i. 57, 55. *Lang. Verz.* ii. 89, 684, 685. *Brahm, Ins. Kal.* 24, 9, 316, 201; 382, 258. *Schwarz, Raup.* 19, 100, 513, 652, 753. *Hübn. Bomb.* 133, 2, pl. 30, f. 129; *Verz. Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K, a, b, f. 1, a. *Wien. Verz.* 52. Fam. E. 2. *Illig. N. Ausg. dess.* i. 78, 2. *Petagna. Treits. Halfsb. Schmett.* 224, 103.

——— ———, *Geoff. Hist. Ins.* ii. 109, 9. *Mouff. Ins.* 93, 18, f. 4, 5. *Röes. Ins. Bel.* iv. 186, pl. 27, f. 1, 2; v. pl. 13, f. 1—4. *Kleeman, Beitr.* pl. 13, f. 1—4. *Frisch. Beschr. Ins.* vii. 14, 99, pl. 9, f. 1. *Schæff. Elem.* pl. 98, f. 1. *Ernst, Pap. d'Eur.* iv. 120, pl. 143, f. 189, a—k. *Scriba, Beitr.* ii. pl. 7, f. 3, *var. Naturf.* viii. 106, 32.

Phalæna festiva, *Hufnagel, Tab. Berl. Mag.* ii. 4, 416, 32, 437.

Eucharia Hebe, *Hübn. Verz. Schmett.* 181, 1865.

Eyprepia Hebe, *Ochs. Schmett. Eur.* iii. 339, 20; iv. 61, 21. *Costa, Faun. Döring, Ent. Zeit. Stett.* ix. 303, 6.

Chelonia Hebe, *God. Pap. de France*, iv. 306, 93, pl. 31, f. 1, 2. *Koch, Raup. und Schmett. Witten. Isis*, 1848, 524. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 146, 23, 9. *Speyer, Ent. Zeit. Stett.* xiii. 313, 15.

a—d. Europe. From M. Becker's collection.
e. Europe.

Var.? Chelonia intercalaris, *Eversm.*
Altai.

11. Arotia fasciata.

Abdomen roseum maculis dorsalibus nigris apicem versus dilatatis, ano omnino nigro; alæ anticæ fuscæ rivulis maculis albidis; posticæ flavæ, nigro maculatæ, limbum versus coccineæ.

Bombyx fasciata, *Esper, Schmett.* iii. 178, pl. 33, f. 3; 47, pl. 87. *Cont.* 8, f. 1. *De Vill. Ent. Linn.* ii. 152, 56, pl. 5, f. 4. *Borkh. Eur. Schmett.* iii. 176, 50.

Bombyx tigrina, *De Vill. Ent. Linn.* ii. 156, 82, pl. 5, f. 5. *Borkh. Eur. Schmett.* 235, 74.

——— ———, *Ernst, Pap. d'Eur.* pl. 3. *Suppl.* pl. 3, f. 187.

Bombyx gratiosa, *Hübn. Bomb.* 134, 5, pl. 31, f. 133.

Euprepia gratiosa, *Hübn. Verz. Schmett.* 181, 1864.

Eyprepia fasciata, *Ochs. Schmett. Eur.* iii. 333, 16; iv. 61, 17.

Chelonia fasciata, *God. Pap. de France*, iv. 310, 94, pl. 31, f. 3, 4, *Boisd. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, *Suppl.* 146, 24, 10. *Latr. Gen. Crust. et Ins.* 142.

Arctia fasciata, *Meig. Handb.* 142, 96; *Syst. Beschr. Eur. Schmett.* iii. 27, 3, pl. 83, f. 4.

a, *b*. Europe. From M. Becker's collection.

12. Arctia Flavia.

Abdomen rubrum, maculis dorsalibus nigris apicem versus dilatatis, ano omnino nigro; alæ anticæ nigræ; limbo et margine interiore cruce et striga prope basin albis, striga longitudinali cum basi cohærenti; posticæ flavæ, nigro maculatæ.

Phalæna Flavia, *Fuessl. Alt. Mag.* ii. 1, 70, 2, pl. 1, f. 11. *Cram. Pap. Exot.* pl. 397, f. 0.

Bombyx Flavia, *Esp. Schmett.* iii. 390, pl. 78, f. 1. *Borkh. Eur. Schmett.* iii. 171, 48. *Fabr. Ent. Syst. Suppl. Oliv. Enc. Méth.* v. 89, 222.

——— ———, *Ernst, Pap. d'Eur.* iv. 119, pl. 142, f. 188.

Bombyx Virgo, *Hübn. Bomb.* 134, 4, pl. 30, f. 132. *Geyer, Suppl.*

Zoote Flavia, *Hübn. Verz. Schmett.* 181, 1869.

Eyprepia Flavia, *Ochs. Schmett. Eur.* iii. 338, 19; iv. 61, 20.

Chelonia Flavia, *God. Pap. de France*, iv. 304, 92, pl. 30, f. 4. *Boisd. Icon. Hist. Lépid.* 130, 5, pl. 59, f. 5. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 146, 25, U.

Arctia Flavia, *Meig. Handb.* 143, 99; *Syst. Beschr. Eur. Schmett.* iii. 27, 2, pl. 83, f. 8.

Siberia. Switzerland.

13. Arctia Caja.

Fusca; abdomen rubrum, maculis dorsalibus nigris apicem versus minoribus, ano innotato; alæ anticæ rivulis albis ciliis concoloribus, posticæ rubræ maculis orbiculatis atro-cæruleis.

Phalæna Bombyx Caja, *Linn. Syst. Nat.* i. 2, 819, 38; *Faun. Suec.* ed. 1, 829, 2, 1131, ed. 2, 300, 1131. *Gmel. ed. Syst. Nat.* i. 5, 2418, 38.

Bombyx Caja, *Fabr. Sp. Ins.* ii. 198, 122; *Mant. Ins.* ii. 128, 172. *Ent. Syst.* iii. 1, 470, 196. *Oliv. Enc. Méth.* v. 92, 228, pl. 61, f. 262. *Hübn. Bomb.* 134, 3, pl. 30, f. 130, 131; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K. c. f. 1, a—c. *Wien. Verz.* 52, Fam. E. 1. *Illig. N. Ausg. dess.* i. 77, 1. *Berk. Syn.* i. 135. *Barb. Gen.* pl. 10, f. 38. *Don. Hist. Nat. Brit. Ins.* i. pl. 15. *Stew. El. Nat. Hist.* ii. 149. *Turt. Syst. Nat.* iii. 223. *Schæff. Icon. Nomencl. Panz.* 41, pl. 29, f. 7, 8.

Esp. Schmett. iii. 167, pl. 30, f. 1—5; pl. 31, f. 1—4; pl. 32, f. 1—4. *Borkh. Eur. Schmett.* iii. 162, 47; *Rhein. Mag.* i. 336, 169. *Sulz. Kennz. Ins.* pl. 16, f. 94. *Müll. Faun. Fridr.* 41, 371. *Fuessl. Schweiz. Ins.* 34, 656; *Ald. Mag.* i. 2, 285; *N. Mag.* 2, 146, 31. *Hufnagel, Pl. in Berl. Mag.* ii. 4, 404, 13. *Naturf.* ii. 17, 4, pl. 1, f. 4; 17, pl. 3, 17; 102, 13, pl. 8; 137, pl. 19. *Schr. Faun. Boic.* ii. 1, 257, 1431. *Rossi, Faun. Etr.* ii. 176, 1098; *ed. Illig.* 280, 1098. *Vieweg. Pl. Verz.* i. 57, 54. *Lang. Verz.* ii. 88, 680—683. *Brahm. Ins. Kal.* 216, 112. *Schwarz, Raup.* 83, 221, 758. *Treits. Hulfsb. Schmett.* 224, 102.

———, *Mouff. Ins.* 93, f. 15. *Aldr. Ins.* 246, f. 11, 12. *Gœd. Ins.* i. pl. 17. *Rai, Ins.* 151, 3; 152, 7. *Geoffr. Ins.* ii. 108, 8. *Deg. Ins.* i. 1, 147, pl, 12, f. 1—9. *Röes. Ins.* i. 2, 1, pl. 1, f. 1—8, *Frisch, Ins.* ii. 38, 10, pl. 9, f. 1—3. *Sepp, Neederl. Ins.* ii. pl. 2, f. 1—7. *Reaum. Ins.* i. pl. 36, f. 6, 7. *Merian, Ins. Eur.* pl. 5. *List. Gœd.* (*Angl.*) 89, f. 99 (*Lat.*); 217, f. 99. *Albin, Nat. Hist. Engl. Ins.* pl. 20. *Harr. Aur.* pl. 12, f. g—m. *Ernst, Pap. d'Eur.* iv. 220, pl. 139, f. 187; pl. 140, f. 187; pl. 141, f. 187; pl. 142, f. 187. *Blank. Ins.* pl. 2, f. A, C. *Suppl. Ins.* iv. pl. 9, f. 2.

Phalæna Caja, *Scop. Ent. Carn.* 201, 503. *Wilkes, Nat. Hist.* 18, pl. 36.

Phalæna Bombyx erinacea, *Retz. Gen.* 36.

Arctia Caja, *Schr. Faun. Boic.* ii. 152, 1. *Meig. Handb.* 142, 97; *Syst. Beschr. Eur. Schmett.* iii. 26, 1, pl. 83, f. 1—3. *Steph. Ill. Brit. Ent. Haust.* ii. 69, 1. *Westw. & Humph. Moths,* i. 95, pl. 19, f. 9, 10.

Zoote Caja, *Hübn. Verz. Schmett.* 181, 1868.

Bombyx Cajus, *Haw. Lep. Brit.* 93.

Eyprepia Caja, *Ochs. Schmett. von Eur.* iii. 335, 18, 61, 19. *Curt. Brit. Ent.* i. 21.

Chelonia Caja, *God. Pap. de France,* iv. 300, 91, pl. 30, f. 1—3. *Zett. Ins. Lapp.* 929, 1. *Ramb. Faun. Cors. Koch, Raup. und Schmett. Witten, Isis,* 1848, 522. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text,* 147, 26, 11. *Speyer, Ent. Zeit. Stett.* xiii. 313, 14. *Eversm. Faun. Lep. Volg. Ural.* 164, 11.

Euprepia Caja, *Döring, Ent. Zeit. Stett.* ix. 304.

Europe. Siberia. United States. California.

a—c. England. From Mr. Foxcroft's collection.
d—z. England. From Mr. Stephens' collection.
aa—kk. England.

ll. Germany. From M. Hoffman's collection.
mm—rr. Europe. From M. Becker's collection.
ss. France.
tt. United States. Presented by E. Doubleday, Esq.
uu. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

The white markings on the fore wings of this species are very variable; sometimes they overspread nearly the whole surface, and in other cases they entirely disappear. The black spots on the hind wings are almost equally variable.

14. Arctia Thulea.

Nigra; prothorax et anus flavidi; pedes rubro annulati; alæ anticæ fasciis maculariibus albis, interioribus interruptis; posticæ rubræ, basi fasciaque intramarginali inæquali nigris.

Bombyx (Arctia) Thulea, *Dalm. Anal. Entom.* 92, 2.
Chelonia Thulea, *Zett. Ins. Lapp.* 929, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 147, 29, 14.
Bombyx alpina? *Acerbi, Iter Suec.* ii. 253, 4, pl. 1, f. 4.

Lapland.

15. Arctia Lapponica.

Alæ anticæ obscure fuscæ, maculis fasciisque flavis fusco marginatis; posticæ basi fuscæ, apice fulvæ, nigro maculatæ.

Bombyx Lapponica, *Thunberg, Dissert. Acad. Upsal.* iii. (1791) 40, pl. f. 7. *Acerbi, Voy. Cap. Nord.* iii. 175, pl. 15, 5, 6. *Schneider, N. Mag. Ent.* i. 5, 589, 13.
Bombyx festiva, *Borkh. Eur. Schmett.* iii. 191, 56. *Schneider, N. Mag. Ent.* i. 4, 431, 13.
Bombyx lapponica, *Thunberg, Dissert. Entomol. Sistens Insecta Suecica*, ii. 40, pl. f. 7. *Acerbi, Voy. Cap. Nord.* iii. 175, pl. 15, 5, 6. *Schneider, N. Mag. Ent.* i. 5, 589, 13.
Bombyx Avia, *Hübn. Bomb.* 136, 13, pl. 53, f. 230; pl. 57, f. 247.
Bombyx festiva, *Borkh. Eur. Schmett.* iii. 191, 56. *Schneider, N. Mag. Ent.* i. 4, 431, 13.
Parasema Lapponica, *Hübn. Verz. Schmett.* 181, 1871.
Eyprepia lapponica, *Ochs. Schmett. Eur.* iii. 315, 8; iv. 60, 207, 8.
Chelonia lapponica, *God. Pap. de France*, iv. 324, 99, pl. 34, f. 1. *Zett. Ins. Lapp.* 929, 3. *Boisd. Icon. Hist. Lépid.* 128, 4, pl. 59, f. 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 147, 30, 15.

Arctia Lapponica, *Meig. Syst. Beschr. Eur. Schmett.* iii. 33, 13, pl. 84, f. 7.

Lapland.

16. ARCTIA VILLICA.

Nigra; abdomen luteum maculis dorsalibus nigris apicem versus minoribus, ano innotato; alæ anticæ maculis rotundatis separatis albis; posticæ luteæ nigro maculatæ.

Phalæna Bombyx villica, *Linn. Syst. Nat.* i. 2, 820, 41.

Bombyx villica, *Gmel. ed. Syst. Nat.* i. 5, 2420, 41. *Fabr. Sp. Ins.* ii. 197, 118. *Mant. Ins.* ii. 128, 168. *Ent. Syst.* iii. 1, 468, 192. *Oliv. Enc. Méth.* v. 90, 223. *Berk. Syn.* i. 135. *Donov. Nat. Hist. Brit. Ins.* ii. pl. 71. *Stew. El. Nat. Hist.* ii. 149. *Turt. Syst. Nat.* iii. 122. *Schæff. Icon. Nomencl. Panz.* 132, pl. 130, f. 1. *Esp. Schmett.* iii. 185, pl. 35, f. 1—6. *Panz. Faun. Germ.* 16—23. *V. Müll. Faun. Siles.* iii. 1, H. var. *Müll. Faun. Fridr.* 42, 376; *Zool. Dan.* 118, 1360. *Borkh. Eur. Schmett.* iii. 182, 53; *Rhein. Mag.* i. 338, 173. *Fuessl. Schweiz. Ins.* 35, 657. *N. Mag.* ii. 335, 146. *Schr. Faun. Boic.* ii. 1, 260, 1436. *Rossi, Faun. Etr.* ii. 175, 1097; *ed. Illig.* 280, 1097. *Hufnagel, Pl. in Bull. Mag.* ii. 4, 404, 14. *Vieweg, Pl. Verz.* i. 58, 57. *Lang. Verz.* ii. 90, 701, 702. *Brahm, Ins. Kal.* 42, 14. *Schwarz, Raup.* 18—84, 512, 653, 755. *Hübn. Bomb.* 135, 9, pl. 31, f. 136. *Larv. Lép.* iii. *Bomb.* ii. *Veræ*, K. a, b, f. 2 a. *Wien. Verz.* 53. Fam. E. *Illig. N. Ausg. dess.* i. 84, 7. *Treits. Hulfsb. Schmett.* 223, 101.

——— ——— *Rai. Ins.* 156, 4. *Reaum.* i. pl. 31, f. 4—6. *Merian, Ins. Eur.* i. pl. 6. *Geoffr. Ins.* ii. 106, 7. *Röes. Ins.* iv. 192, pl. 28, f. 2; 197, pl. 29, f. 1—4. *Albin, Nat. Hist. Engl. Ins.* pl. 21, f. 27, a—d. *Harr. Aur.* pl. 4. *Frisch. Ins.* x. 3, pl. 2, f. 1. 2. *Sepp. Neederls, Ins.* ii. pl. 16, f. 1—7. *Ernst, Pap. d'Eur.* iv. 138, pl. 150, f. 196, a—g; pl. 151, f. 196, h—o.

Phalæna villica, *Scop. Ent. Carn.* 203, 504. *Wilkes, Nat. Hist. Ins.* 18, pl. 37.

Phalæna vidua, *Poda, Mus. Græc.* 88, 15.

Arctia villica, *Schr. Faun. Boic.* ii. 152, 7. *Latr. Gen. Crust. et Ins. Meig. Handb.* 140, 90, pl. 11, f. 3; *Syst. Beschr. Eur. Schmett.* iii. 28, 5, pl. 84, f. 2. *Steph. Ill. Brit. Ent. Haust.* ii. 71, 2. *West. & Humph. Brit. Moths*, i. 95, pl. 19, f. 9, 10.

Bombyx villicus, *Haw. Lep. Brit.* 94.

Epicalia villica, *Hübn. Verz. Schmett.* 182, 1815.

Eyprepia villica, *Ochs. Schmett. Eur.* 101, 330, 15; W. 60, 16. *Curt. Brit. Ent.* i. 21.

Chelonia villica, *God. Pap. de France*, iv. 336, 104, pl. 35, f. 1. *Koch, Raup. und Schmett. Wittens. Isis*, 1848, 515. *Ramb. Faun. Cors. Herr.-Schæff. Samml. Suppl.* ii. *Text*, 148, 31, 16. *Eur. Schmett. Speyer, Ent. Zeit. Stett.* xiii. 288, 12.

Var. β. *Maculis alarum anticarum flavidis, superioribus costæ adhærentibus, posticis tribus in fasciam intus dentatum coalitis; costa subtus phœnica.*

Euprepia villica, *var.* sicula, *Zeller, Isis*, 1847, 433, 104.
Bombyx Konewkaii, *Freyer, Neue Beitr.* i. 61, 178, pl. 33, f. 1, 2.
Arctia domiduca, *Dahl. Meig. Syst. Beschr. Eur. Schmett.* iii. 267, 17, pl. 123, f. 12.

Var. γ ut *a*, *sed alis anticis fuscis, maculis posticis discutis; maculis alarum posticarum fuscis.*

Euprepia villica, *var.* b, *Zeller, Isis*, 1847, 433, 104.
Euprepia villica, *Costa, Faun. Döring, Ent. Zeit. Stett.* ix. 303, 9.
Var. δ. Angelicæ, *Freyer, Neuere Beitr.*

a—f. England. From Mr. Foxcroft's collection.
g—t. England. From Mr. Stephens' collection.
v—z. England.
aa—ee. Europe. From M. Becker's collection.

17. Arctia aulica.

Alæ anticæ ferrugineæ flavo maculatæ; posticæ aurantiacæ, fascia prope basim, macula media duabusque limbalibus nigris.

Arctia aulica, *Schr. Faun. Boic.* ii. 152, 6. *Steph. Ill. Brit. Ent. Haust.* ii. 71, 6. *Meig. Handb.* 141, 49; *Syst. Beschr. Eur. Schmett.* iii. 32, 11, pl. 84, f. 5—6. *Wood, Ind. Ent.* pl. 53, f. 41.
Phalæna Bombyx aulica, *Linn. Syst. Nat.* ii. 829. *Gmel. ed. Syst. Nat.* i. 5, 2433—68, 681. *Faun. Suec. ed.* 2, 301, 1133. *Martyn, V.M. Stew. El. Nat. Hist.* ii. 154. *Turt. Syst. Nat.* iii. 213. *Wilk. Ins.* 19, pl. 3, a. 3.
Bombyx aulica, *Fabr. Sp. Ins.* ii. 190, 92; *Mant. Ins.* ii. 122, 125. *Ent. Syst.* iii. 1, 450, 134. *Clerck, Icon.* pl. 4, f. 3. *Esp. Schmett.* iii. 328, pl. 65, f. 6, 7. *Borkh. Eur. Schmett.* iii. 190, 55; 470, 55; *Rhein. Mag.* i. 339, 175. *Fuessl. Alt. Mag.* ii. 2, 226; *N. Mag.* ii. 375. *Schr. Faun. Boic.* ii. 1, 260, 1435. *Rossi, Faun. Etr.* ii. 173, 1089; *ed. Illig.* 276, 1089. *V. Müll. Faun. Siles.* iii. 1, H. *Lang. Verz.* ii. 91, 705—707. *Brahm, Ins. Kal.* 147, 75, 393, 272. *Schwarz, Raup.* 645, 754. *Hübn. Bomb.* 136, 11, pl. 32, f. 139. *Wien. Verz.* 53. *Faun.* E. 6. *Illig. N. Ausg. dess.* i. 83, 6. *Treits. Hulfsb. Schmett.* 222, 99.

–, *Albin, Ins.* pl. 22. *Merian, Ins. Eur.* ii. pl. 8. *Gronov. Zooph.* 854. *Watch. Naturf.* 3, pl. 1, f. 8. *Meineke, Naturf.* 6, pl. 5, 3. *Geoffr. Ins.* ii. 109, 10. *Naturf.* iv. 141, pl. 1, f 8; iv. 115, pl. 5, f. 3. *Ernst, Pap. d'Eur.* iv. 136, pl. 149, f. 195, b—f.

Hyphoraia aulica, *Hübn. Verz. Schmett.* 182, 1874.

Eyprepia aulica, *Ochs. Schmett. Eur.* iii. 324, 12; iv. 60, 13.

Chelonia aulica, *God. Pap. de France,* iv. 331, 102, pl. 34, f. 4. *Boisd. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text,* 148, 32, 17. *Speyer, Ent. Zeit. Stett.* xiii. 287, 11.

Bombyx (Eyprepia) aulica, *Freyer, Neuere Beitr. Schmett.* ii. 106, pl. 158.

Euprepia aulica, *Döring, Ent. Zeit. Stett.* ix. 304, 10.

a—d. Europe. From M. Becker's collection.

e. Europe.

18. Arctia curialis.

Alæ anticæ ferrugineæ, maculis flavis; posticæ flavæ, limbum versus coccineæ, fascia prope basim, macula media duabusque limbalibus nigris.

Arctia curialis, *Meig. Syst. Beschr. Eur. Schmett.* iii. 32, 12, pl. 84, f. 5.

Bombyx maculania, *Lang. Verz.* ii. 91, 708, 709.

Bombyx curialis, *Borkh. Eur. Schmett.* iii. 192, 471, 57.

——— ———, *Ernst, Pap. d'Eur.* pl. 4. *Suppl.* f. 195, a—f.

Bombyx aulica, var., *Esp. Schmett.* iii. 4, pl. 80. *Cont.* 1, f. 2, 3.

Bombyx civica, *Hübn. Bomb.* 136, 12, pl. 32, f. 140, 141; *Beitr.* ii. 1, 1, 11, pl. f. E.; 3, 1, 63, pl. f. F.

Hyphoraia civica, *Hübn. Verz. Schmett.* 182, 1873.

Eyprepia curialis, *Ochs. Schmett. Eur.* iii. 326, 13; iv. 60, 14.

Chelonia civica, *God. Pap. de France,* iv. 328, 101, pl. 34, f. 3. *Herr.-Schæff. Samml. Eur. Schmett.* 16. *Text,* 148, 33, 18.

Arctia aulica, *var.?*

a, b. Europe. From M. Becker's collection.

19. Arctia Dejeanii.

Statura omnino A. civicæ *illiusque forsan varietas; alæ anticæ fusco-ferrugineæ, vitta longitudinali flexuosa punctisque quinque flavis; posticæ luteæ maculis* 6—7 *nigris, limboque rubricante.*

Arctia Dejeanii, *Meig. Syst. Beschr. Eur. Schmett.* iii. 33, 14, pl. 84, f. 4.

Chelonia Dejeanii, *God. Pap. de France*, iv. pl. 34, f. 2. *Boisd. Eur. Lep. Index Méth.* 42. *Icon. Hist. Lépid.* 126, 2, pl. 60, f. 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 148, 34, 19.

Spain.

20. ARCTIA PURPUREA.

Alæ anticæ flavæ, fusco punctatæ; posticæ rubræ nigro maculatæ.

Phalæna Bombyx purpurea, *Linn. Syst. Nat.* ii. 828, 67. *Gmel. ed. Syst. Nat.* i. 5, 21, 32, 67. *Stew. El. Nat. Hist.* ii. 154. *Turt. Syst. Nat.* iii. 221.

Bompyx purpurea, *Fabr. Sp. Ins.* ii. 196, 114; *Mant. Ins.* ii. 127, 162. *Ent. Syst.* iii. 1, 466, 185. *Oliv. Enc. Méth.* v. 87, 216. *Schæff. Icon. Nomencl. Panz.* 77, pl. 59, f. 4, 5. *Esp. Schmett.* iii. 325, pl. 65, f. 1—5; 20, pl. 83. *Cont.* 4, f. 1. *Borkh. Eur. Schmett.* iii. 193, 58; *Rhein. Mag.* i. 340, 176. *Fuessl. Schweiz, Ins.* 36, 680; *N. Mag.* iii. 2, 146, 26; 149, 77; 153, 98. *Naturf.* vi. 75, 4. *Vieweg, Pl. Verz.* i. 58, 58. *Lang. Verz.* 92, 710—713. *Brahm, Ins. Kal.* 103, 46. *Schwarz, Raup.* 89, 237, 528, 758. *Hübn. Bomb.* 137, 14, pl. 33, f. 142; pl. 53, f. 229. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K. e. f. 1, a, b. *Wien. Verz.* 53. *Fam.* E. 9. *Illig. N. Ausg. dess.* i. 86, 9. *Treits. Hulfsb. Schmett.* 222, 98.

——— ———, *Albin, Ins.* pl. 22. *Merian, Ins. Eur.* i. pl. 6. *Seba, Mus.* iv. pl. 59, f. 4, 5. *Geoffr. Ins.* ii. 105, 6. *Röes. Ins. Bd.* i. 2, 65, pl. 10. *Ernst, Pap. d'Eur.* iv. 145, pl. 153, f. 198.

Bombyx purpureus, *Schr. Faun. Boic.* ii. 1, 261, 1438.

Arctia purpurea, *Schr. Faun. Boic.* ii. 153, 9. *Latr. Gen. Crust. et Ins. Steph. Ill. Brit. Ent. Haust.* ii. 71, 5. *Meig. Handb.* 141, 93; *Syst. Beschr. Eur. Schmett.* iii. 31, pl. 84, f. 8. *Wood, Ind. Ent.* pl. 54, f. 40.

Rhyparia purpurea, *Hübn. Verz. Schmett.* 183, 1878.

Eyprepia purpurea, *Ochs. Schmett. Eur.* iii. 322, 11; iv. 60, 12.

Chelonia purpurea, *God. Pap. de France*, iv. pl. 35, f. 2, 3. *Koch, Raup. und Schmett. Witten. Isis*, 1848, 521. *Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text*, 148, 35, 20. *Speyer, Ent. Zeit. Stett.* xiii. 288, 13.

Bombyx (Eyprepia) purpurea, *Freyer, Neuere Beitr. Schmett.* iii. 111, pl. 272, f. 3.

Callimorpha purpurea, *Eversm. Faun. Lep. Volg. Ural.* 166, 16.

Euprepia purpurea, *Döring, Ent. Zeit. Stett.* ix. 303, 3.

Europe. Siberia.

a—d. Europe. From M. Becker's collection.

North America.

A. Alæ anticæ nigræ aut fuscæ.
  A. Alæ anticæ maculatæ, non vittatæ.
    a. Alæ anticæ fuscæ.
      a. Abdomen supra nigrum, apice rufum. Americana, *Harris.*
      b. Abdomen supra fuscum, apice fulvum. Parthenos, *Harris.*
    B. Alæ anticæ nigræ.
      a. Alæ anticæ maculis paucis. - - Placentia, *Abbot.*
      b. Alæ anticæ maculis plurimis. - virginalis, *Boisd.*
  B. Alæ anticæ vittatæ.
    A. Femora antica nigra, flavo notata.
      a. Alæ anticæ quinque vittatæ. - - - Virgo, *Linn.*
      b. Alæ anticæ trivittatæ.
        i. Alæ anticæ venis apicalibus pallidis. Virguncula, *Kirby.*
        ii. Alæ anticæ venis apicalibus obscuris.
          * Alæ anticæ vitta furcata. - 5. Nais, *Drury.*
          ** Alæ anticæ vitta furcata nulla. 6. Phyllira, *Drury.*
    B. Femora antica rufa. - - - - Dione, *Fabr.*
  C. Alæ anticæ unimaculatæ et univittatæ. hyperborea, *Curt.*
B. Alæ anticæ fulvæ aut flavæ, nigro maculatæ.
  A. Alæ posticæ roseæ. - - - - Isabella, *Abbot.*
  B. Alæ posticæ subcinereæ. - - - - gelida, *Mösch.*

The European *Arctiæ* may be divided into four principal groups, which are represented by *A. Caja*, *A. Hebe*, *A. maculosa* and *A. Casta*. The North American species form three groups; the first with *A. Americana* belongs to the group of *A. Caja;* the second seems to be almost peculiar to North America, and comprises *A. Virgo*, *A. Dione*, *A. Nais* and *A. Phillira;* the third is also peculiar to that region, and contains *A. Placentia.*

21. Arctia Americana.

Alæ anticæ fuscæ, maculis rivulisque albidis; posticæ fulvo-flavæ, maculis unica media reniformi, tribusque posticis rotundis nigris; abdomen fulvum, dorso nigro quadrimaculato.

Arctia Americana, *Harris, Report on Insects injurious to Vegetation*, 246; *Agassiz, on Lake Superior*, 391, pl. 7, f. 5.

Trenton Falls. Lake Superior.

Var.? Reddish brown. Vertex and fore part of the thorax bright red. Proboscis, palpi and antennæ black. Thorax with a pale yellow band in front, and along part of each side. Abdomen reddish; disk above, except towards the tip, black. Fore wings with

about twelve pale yellow dots, which are mostly towards the borders. Hind wings luteous, blackish at the base and along the inner border, and with two black and somewhat undulating black bands, the inner one furcated in front. Legs mostly clothed with red hairs.

a. District watered by the Mackenzie and Slave Rivers. Presented by Sir J. Richardson.

22. Arctia Parthenos.

Alæ anticæ obscure fuscæ, maculis sparsis lactifloreis; posticæ fulvo-flavæ; basi, macula media triangulari, fasciaque postica undata nigris; abdomen supra fuscum, apice fulvum.

Arctia Parthenos, *Harris, Agassiz, on Lake Superior*, 390, pl. 7, f. 4.

Lake Superior.

23. Arctia Virgo.

Albida; thorax maculis duabus anticis vittisque tribus nigris; abdomen rufum, nigro trivittatum; alæ anticæ nigræ, vittis quinque, venis apicalibus fasciisque obliquis interruptis albidis; posticæ rufæ, nigro maculatæ.

Euplagia Virgo, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, viii. *Callimorphæ*, B. *Variegatæ*, 21, f. 1—4; *Verz. Schmett.* 180, 1859.

Arctia Virgo, *Abbot and Smith, Nat. Hist. Lep. Ins. Georg.* ii. 123, pl. 62.

Phalæna Virgo, *Linn. Mus. Lud. Uls.* 381. *Clerck, Icon.* pl. 45, f. 5. *Gmel. ed. Syst. Nat.* i. 5, 2419, 39.

Bombyx Virgo, *Fabr. Sp. Ins.* ii. 199, 123. *Mant. Ins.* ii. 129, 178. *Ent. Syst.* ii. *Oliv. Enc. Méth.* v. 93, 233.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

e. Nova Scotia. From Lieut. Redman's collection.

Var.? *Thorax incarnatus, maculis quinque nigris; alæ anticæ nigræ, rivulis incarnato pallidis; posticæ rubræ, maculis quinque nigris.*

Callimorpha Parthenice, *Kirby, Fauna, Bor. Amer.* iv. 303, 1.

North America.

24. Arctia Dione.

Alæ anticæ rufescente-albidæ, nigro maculatæ et lineatæ; posticæ incarnatæ aut albidæ, maculis nigris nonnunquam flavo marginatis; abdomen incarnatum, nigro maculatum.

Phalæna (Noctua) Arge, *Drury, Ins.* i. 35, pl. 18, f. 3. *App.* ii.
Bombyx Arge, *Oliv. Enc. Méth.* v. 93, 232.
Bombyx Dione, *Fabr. Ent. Syst.* iii. 1, 442, 106. *Abbot and Smith, Nat. Hist. Lep. Ins. Georg.* ii. 125, pl. 63.
Euplagia Dione, *Hübn. Verz. Schmett.* 180, 1862.
Arctia Arge, *Hübn. Verz. Schmett.* 183, 1882.
Spilosoma Arge, *Westw. Ed. Drury*, i. 33, pl. 18, f. 3.

New York.

Var. α. Fore wings reddish white, with cuneiform black spots. Hind wings red, with black yellow-bordered spots.

Var. β, like *var. α.* Spots of the fore wings much larger, and forming a stripe towards the hind border.

Var. γ, like *var. β.* Spots of the fore wings still larger, and more inclined to form stripes. Spots of the hind wings without yellow borders.

Var. δ. Hind wings whitish, their spots small, and without yellow borders.

a, b. Georgia. From Mr. Abbot's collection.
c—h. United States. Presented by E. Doubleday, Esq.
i, j. From Mr. Milne's collection.

25. Arctia Virguncula.

Thorax flavus, maculis quinque nigris; alæ anticæ nigræ, rivulis carneo pallidis, apice radiantibus; posticæ luteæ, nigro maculatæ.

Callimorpha Virguncula, *Kirby, Fauna Bor. Amer.* iv. 304, 2, pl. 4, f. 6.

Canada.

a. United States. Presented by E. Doubleday, Esq.

26. Arctia Nais.

Albida; thorax maculis duabus anticis vittisque tribus nigris; abdomen vitta lata nigro; alæ anticæ nigræ, vittis tribus, 2a furcata, fasciisque obliquis subapicalibus albidis; posticæ flavescentes aut rufæ, plus minusve nigro variæ.

Phalæna (Noctua) Nais, *Drury, Ins.* i. 15, pl. 7, f. 3. *Append.* i. 2.
Arctia Nais, *Hübn. Zeit.* f. 599, 60. *Verz. Schmett.* 183, 1884.
Spilosoma Nais, *Westw. Ed. Drury*, i. 15, pl. 7, f. 3.

Var. β, male. Fore stripe of the fore wings not joining the costa.

Var. γ, *male.* Inner border of the hind wings reddish.

Var. δ, *male.* Hind wings almost spotless.

Var. ε, *male.* Fore wings with no pale oblique bands towards the tips.

Var. ζ, *fem.* like *var.* ε. Hind wings red, with broad blackish borders. Abdomen wholly brown, except on each side above towards the base.

Var. η, *fem.* Fore wings with testaceous veins; fore stripe and part of the middle stripe almost wanting.

a—e. United States. Presented by E. Doubleday, Esq.
f. United States. From Mr. Milne's collection.
g. Massachusetts. From Prof. Sheppard's collection.

27. Arctia Phyllira.

Alæ anticæ nigræ lineis albidis apicalibus, literam B referentibus; posticæ sanguineæ maculis nigris.

Phalæna (Bombyx) Phyllira, *Drury, Ins.* i. 15, pl. 7, f. 2. *Append.* v. 2. *Oliv. Enc. Méth.* v. 94, 236. *Abbot and Smith, Nat. Hist. Lep. Ins. Georg.* ii. 127, pl. 64.
Callimorpha Phyllira, *Westw. Drury*, i. 15, pl. 7, f. 2.
Euplagia Phyllira, *Hübn. Verz. Schmett.* 180, 1861.

a. United States. From Mr. Milne's collection.
b—d. ——— ?

28. Arctia Placentia.

Nigro-fusca; alæ anticæ gutta una aut maculis tribus pallide testaceis; posticæ rubræ, margine maculisque nonnullis submarginalibus nigro-fuscis; abdomen supra rubrum maculis dorsalibus apiceque nigro-fuscis.

Phalæna Placentia, *Abbot and Smith, Nat. Hist. Lep. Ins. Georgia,* ii. 129, pl. 65.
Heraclia Placentia, *Hübn. Verz. Schmett.* 180, 1857.

Var. α. Fore wings with the outer fringe partly pale testaceous, and with several spots and dots of the same colour in the disk.

Var. β. Fore wings with the outer fringe wholly blackish brown, unspotted, except two very minute pale testaceous dots.

a, b. North America. From Mr. Milne's collection.

29. Arctia virginalis.

Abdomen supra fulvum, cingulis nigris, subtus nigrum; alæ anticæ nigræ maculis circiter viginti flavido-albis, posticæ fulvæ, fasciis nigris.

Chelonia virginalis, *Boisd. Ann. Soc. Ent. Fr.* 2me *Sér.* x. 321, 70.

California.

30. Arctia Isabella.

Alæ nigro punctatæ; anticæ fulvæ; posticæ roseæ; antennæ flavæ.

Phalæna Isabella, *Abbot and Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 131, pl. 68.

Estigmene Isabella, *Hübn. Verz. Schmett.* 184, 1896.

Georgia.

31. Arctia gelida.

Nigra; thoraxe flavo bivittatus; abdominis latera flava, nigro maculata; alæ anticæ flavescentes, maculis angulosis nigris; posticæ subcinereæ.

Euprepia gelida, *Möschler, Ent. Zeit. Stett.* ix. 17, 3, 174.

Labrador.

32. Arctia hyperborea.

Mas. *Castaneo-fusca; alæ anticæ macula costali vittaque postica interrupta isabellinis; posticæ fascia fusco unimaculata margineque ochraceis.*

Eyprepia hyperboreus, *Curtis, Append. Ross. Narr. 2nd Voy.* lxxi. 17.

Arctic America.

South America.

A. Alæ anticæ fasciis nigro-fuscis. - - - Zerah, *Cram.*
B. Alæ anticæ testaceo bistrigatæ. - - fervida, *Walk.*
C. Alæ anticæ plaga discali rosea. - - - Amasis, *Cram.*

33. Arctia? Zerah.

Fusca; proboscis brevis; abdomen luteum, fasciis nigris; alæ anticæ fasciis quinque macularibus nigro-fuscis, lituraque discali nigricante; posticæ pallide luteæ, venis rufescentibus, fasciis duabus fuscis, una submarginali maculari margineque nigris.

Phalæna Zerah, *Cram. Pap. Exot.* iv. 227, pl. 397, f. G.
Rhyparia Zerah, *Hübn. Verz. Schmett.* 183, 1879.

Surinam.

34. ARCTIA FERVIDA.

Nigro-fusca ; abdominis segmenta rufo fasciata ; alæ anticæ testaceo bistrigatæ, albo ciliatæ, subtus rufæ, fusco marginatæ ; posticæ læte rufæ, fusco marginatæ.

This species differs from the typical form of *Arctia*, but has some resemblance to *A. Placentia*.

Male. Head and thorax thickly clothed with rather long hairs. Proboscis short. Palpi hairy, porrect; third joint conical, small. Antennæ minutely pectinated. Abdomen with short hairs, extending a little beyond the hind wings. Fore wings nearly triangular, almost straight along the costa ; outer border very slightly oblique ; hind angle rounded; first, second and third inferior veins very near together at the base; fourth thrice further from the third than the third from the first. Hind wings full two-thirds of the length of the fore wings. Legs rather stout; hind tibiæ armed with two medial and two apical spurs of moderate length.

Blackish brown. Abdominal segments with bright red dorsal bands. Fore wings with a white fringe along the outer border; two pale testaceous streaks; one extending in the disk from the base to half the length ; the other short, oblique, at two-thirds of the length, extending from near the fore border into the disk; under side red, with brown borders. Hind wings bright red, with very broad blackish brown borders, which in their narrowest part are accompanied by a slender curved brown band; under side like the upper side, but without the band. Length of the body 6 lines; of the wings 16 lines.

a. Guatimala. From M. Sallé's collection.

35. ARCTIA? AMASIS.

Albida ; thorax punctis duobus lateralibus nigris vittisque duabus obliquis fuscis ; abdomen nigrum, fasciis coccineis, apice luteum ; alæ anticæ plaga discali rosea, fasciis duabus angulatis unaque undulosa, litura discali guttaque postica fuscis ; posticæ luteæ, maculis quatuor submarginalibus unaque discali nigris.

Phalæna Amasis, *Cram. Pap. Exot.* iii. 23, pl. 206, f. B.
Rhodogastria Amasis, *Hübn. Verz. Schmett.* 172, 1776.

Surinam.

Allied to *Spilosoma*.

Asia.

A. Alæ anticæ purpureo-cinereoque variæ. - Horsfieldii, *Saund.*
B. Alæ anticæ cervino-fuscoque variæ. - - strigatula, *Walk.*
C. Alæ anticæ albo-fuscoque variæ.
A. Alæ posticæ nigro-fuscæ, flavo bifasciatæ. - imbuta, *Walk.*
B. Alæ posticæ albæ, fusco variæ. - - - divisa, *Walk.*
C. Alæ posticæ flavæ, nigro bifasciatæ. - - Bajularia, *Cram.*
D. Alæ posticæ sublimpidæ, marginibus nigro-fuscis. strigosa, *Walk.*

The Asiatic species differ from the typical groups, and appear to connect *Arctia* with *Spilosoma*.

36. Arctia Horsfieldii.

Alæ anticæ purpureo subcinereæ, strigis plurimis abbreviatis obsoletis undatis obscure cinereis margine postico parallelis, lineaque distinctiore basali angulata obscure cinerea, maculaque trans medium elongata reniformi discali; alarum posticarum color fusco aurantiacus in purpureo-cinereum mutatus, macula discali radiisque obscure cinereis.

Arctia Horsfieldii, *Saunders, Trans. Ent. Soc. New Series*, i. 162, pl. 12, f, 1, 2. *Zool.* ix. 3070.

Java.

Larva feeds on the Gossypium herbaceum, *Linn.*

37. Arctia strigatula.

Cervina; alæ anticæ fusco guttatæ; posticæ rufæ fascia fusca; pedes fusci, femoribus supra rufis. Mas.—*Alæ anticæ fascia obliqua subapicali fusca.*

Fawn colour. Hind wings pale red. Abdomen red, with three stripes of black spots. Legs mostly brown; femora red above. *Male.*—Antennæ rather deeply pectinated. Fore wings with several brown dots, and towards each tip with an interrupted oblique brown streak; under side streaked with pale red, and with fewer and larger

brown marks. Hind wings with a brown discal spot, and with an almost entire brown submarginal band, which is interrupted on the under side. *Fem.*—Antennæ very minutely pectinated. Fore wings with fewer brown dots and without the streak, wholly pale red beneath. Hind wings with a much interrupted band. Length of the body 6—8 lines; of the wings 16—20 lines.

a, *b*. Java. From the East India Company's collection.

38. Arctia imbuta.

Obscure fusca; thorax albido trivittatus; abdomen supra coccineum, vittis tribus macularibus nigris, subtus e maculis testaceis bivittatum; alæ anticæ fasciis tribus macularibus diffusis albis, posticæ testaceo bivittatæ.

Dark brown. Head white above and about the eyes. Proboscis testaceous. Antennæ black. Thorax with three whitish stripes, the middle one in front and very short. Abdomen crimson above, with three rows of black spots; under side with two rows of testaceous spots. Coxæ and femora with red stripes. Fore wings with several white marks of various size and shape, mostly arranged in three very irregular and imperfect bands. Hind wings with two testaceous bands, the outer one marginal, the inner one more or less interrupted. Length of the body 7—7½ lines; of the wings 22—24 lines.

a. Himalaya Mountains. From Mr. Leadbeater's collection.
b. North India. Presented by Mrs. Manger.

39. Arctia divisa.

Albida; thorax guttis duabus anticis vittisque tribus nigris; abdomen luteum, vittis tribus macularibus nigris; alæ anticæ fasciis quatuor interruptis nigro-fuscis; posticæ macula discali fasciaque submarginali fuscis.

White, slightly tinged with cream colour. Head black on each side in front. Proboscis testaceous. Palpi black, luteous towards the base. Antennæ black. Thorax with two black dots in front, and with three black stripes which are shortened in front. Abdomen luteous, with three rows of black spots; under side paler, with two rows of black spots. Legs black, white beneath; femora above and coxæ red. Fore wings with four oblique irregular and imperfect blackish brown bands, which are interrupted by the whitish veins; first and second bands connected in the middle. Hind

wings with a large brown discal spot, and with an irregular brown submarginal band.

Var. β, *fem.* Thorax with two large black spots in front. Abdomen reddish, with an entire black dorsal stripe. Dark parts of the wings occupying most of the surface. Length of the body 6—8 lines; of the wings 18—22 lines.

a. Himalaya Mountains. Presented by the Entomological Club.
b, *c*. North India. From Mr. Stevens' collection.

40. Arctia? Bajularia.

Fusca; abdomen flavum; alæ anticæ maculis duabus fasciaque abbreviata submarginali albis; posticæ flavæ, fasciis duabus nigris, exteriore maculari.

Phalæna Bajularia, *Clerck, Icon.* pl. 54, f. 6, 7. *Cram. Pap. Exot.* ii. 115, pl. 172, f. c.

Amboina.

41. Arctia strigosa.

Mas. *Nigro-fusca; thorax ocellis duobus anticis connexis vittisque quatuor albo-rufis; abdomen supra rufum, e maculis nigris trivittatum, subtus album fasciis fuscis; alæ anticæ albæ fusco strigatæ, posticæ sublimpidæ, marginibus cinereo-fuscis.*

Male. Blackish brown. Head red behind and beneath, bordered with white about the eyes. Proboscis tawny. Palpi white beneath. Antennæ white above. Prothorax with two reddish white connected ringlets; mesothorax with a mark on each shoulder and four stripes of the same colour. Abdomen red above, with three rows of black spots, those in the middle row very small; under side white, with short brown bands, and on each side a row of blackish brown spots. Legs brown, with white stripes; coxæ and femora with red stripes. Fore wings white, with numerous brown streaks, which are most prevalent towards the tips; a reddish tinge at the base. Hind wings nearly limpid, with grayish brown borders and veins. Length of the body 5—8 lines; of the wings 16—22 lines.

a, *b*. ———? Presented by E. Doubleday, Esq.

Australia.

The single Australian species is allied to the European *Arctiæ*, and has most resemblance to *A. maculosa* and *A. Casta*.

42. ARCTIA FUSCINULA.

Cervina; palpi antennæque nigra; thorax nigro trivittatus; pedes fusci, coxis femoribusque rufis; abdomen rufum, vittis tribus macularibus nigris; alæ anticæ vitta una fasciisque duabus macularibus flavo-albis; posticæ pallide rufæ, macula discali fasciaque marginali nigro-fuscis.

Fawn colour. Palpi and antennæ black. Thorax with three black stripes. Abdomen red, with three stripes of black spots, the middle row forming short bands. Legs brown; coxæ and femora mostly red. Fore wings blackish brown, with a yellowish white stripe, which proceeds obliquely from the base to three-fourths of the length of the costa, and is more or less interrupted, and with two oblique interrupted more or less macular yellowish white bands, one beyond the middle, the other marginal. Hind wings pale red, with a blackish brown discal spot and a broad blackish brown marginal band. Length of the body 6—7 lines; of the wings 14—16 lines.

a, *b*. Sydney. Presented by E. Doubleday, Esq.
c. New Holland. Presented by J. Hunter, Esq.
d. New Holland. Presented by Major-General Hardwicke.

Genus 5. PERICALLIA.

Corpus robustum, lineare, cylindricum. Proboscis brevis. Palpi breves, validi, porrecti, pilosi; articulus 2us 1o multo longior, 3us minimus. Antennæ corporis dimidio non longiores. Abdomen longum, alas posticas paullo superans. Alæ longiusculæ. Pedes validi; femora hirta; femora tibiæque antica æqualia; tibæ posticæ calcaribus quatuor parvis. *Mas.*—Antennæ subserratæ, subsetosæ. Abdominis forceps analis robusta.

Phalæna Bombyx, p., *Linn.*; *Esp.*; *Gmel.*; *Scop.*
Bombyx, p., *Fabr.*; *Illig.*; *Borkh.*; *Hübn.*
Arctia, p., *Schr.*; *Steph.*
Pericallia, *Hübn. Verz. Schmett.* 182.
Eyprepia, p., *Ochs.*; *Meig.*

Body stout, linear, cylindrical. Proboscis short. Palpi short, stout, porrect, hairy; second joint much longer than the first; third

very small. Antennæ hardly half the length of the body. Abdomen long, extending a little beyond the hind wings. Wings rather long. Fore wings with the costa almost straight; second inferior vein as far from the first as from the third; fourth about ten times further from the third than the third is from the second. Legs stout; femora hairy; fore femora and fore tibiæ of equal length; hind tibiæ with four rather small spurs. *Male.*—Antennæ minutely serrated and setose beneath. Abdomen with stout anal forceps.

1. PERICALLIA MATRONULA.

Fusca; corpus purpureum, flavo-nigroque maculatum; alæ anticæ maculis præsertim costulibus sulphureis; posticæ aurantiacæ nigro maculatæ.

Noctua matronula, *Linn. Syst. Nat.* i. 2, 835, 92. *Turt. Syst. Nat.* iii. 222. *Esp. Schmett.* iv. 44, pl. 84. *Noct.* 5, f. 1—5.

Phalæna matronula, *Gmel. ed. Syst. Nat.* i. 5, 2437, 92.

——— ———, *Merian, Ins. Eur.* 58. *Röes. Ins. Bel.* iii. 235, pl. 39, f. 1, 2; iv. 36, pl. 4, f. 4. *Ernst, Pap. d'Eur.* iv. 133, pl. 148, f. 194; pl. 149, f. 194. *Suppl.* pl. 3, f. 194. *Freyer, Beitr.* pl. 44.

Bombyx matronula, *Fabr. Mant. Ins.* ii. 128, 167; *Ent. Syst.* iii. 1, 468, 191. *Oliv. Enc. Méth.* v. 89, 22, 1. *Wien. Verz.* 53, Fam. E. 5. *Illig. N. Ausg. dess.* i. 82, 5. *Borkh. Eur. Schmett.* iii. 185, 54. *Fuessl. Schweiz. Ins.* 37, 694. *V. Müller, Faun. Siles.* iii. 1, H. *Schr. Faun. Boic.* ii. 1, 259, 1434. *Lang. Verz.* ii. 90, 695—700. *Schwarz, Raup.* 393, 577. *Petagna. Treits. Hulfsb. Schmett.* 223, 100.

Arctia matronula, *Schr. Faun. Boic.* ii. 152, 5. *Latr. Gen. Crust. et Ins. Steph. Ill. Brit. Ent. Haust.* ii. 70, 2. *Wood, Ind. Ent.* pl. 54, f. 38.

Bombyx matrona, *Hübn. Bomb.* 136, 10 (fœm.), pl. 32, f. 138 (mas), pl. 55, f. 239. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K. d, f. 1, a—d.

Phalæna Idriensis, *Scop. Ent. Carn.* 113, 121.

Pericallia matrona, *Hübn. Verz. Schmett.* 182, 1872.

Eyprepia matronula, *Ochs. Schmett. Eur.* iii. 327, 14; iv. 60, 15. *Meig. Syst. Beschr. Eur. Schmett.* iii. 39, 1, pl. 86, f. 1.

Callimorpha matronula, *Herr.-Schæff. Suppl.* 150, 41, 1. *Speyer, Ent. Zeit. Stett.* xiii. 285, 7.

Chelonia matrona, *God. Pap. de France*, iv. pl. 34, f. 5.

Chelonia matronula, *Eversm. Faun. Lep. Volg. Ural.* 163, 9.

Euprepia matronula, *Döring, Ent. Zeit. Stett.* ix. 304, 11.

a—c. Europe.

Genus 6. DARITIS.

Corpus robustum, sublineare, subcylindricum. Proboscis brevis. Palpi porrecti, longiusculi, sat longi, *maris* pilosiores; articulus 2us 3o fere duplo longior. Abdomen alas posticas non superans. Pedes validi; tibiæ posticæ calcaribus quatuor parvis. *Mas.*— Antennæ mediocriter pectinatæ. Alæ posticæ e maxima parte hyalinæ. *Fœm.*—Antennæ subserratæ.

Euprepia, p., *Klug.*

Body stout, nearly linear and cylindrical. Proboscis short. Palpi porrect, rather long, more hairy in the male than in the female; third joint more than half the length of the second in the female, rather shorter in the male. Antennæ much more than half the length of the body, moderately pectinated in the male, minutely serrated in the female. Abdomen not extending beyond the hind wings. Four wings with the costa almost straight; first and second inferior almost contiguous at the base; fourth about thrice further from the third than the third is from the second. Hind wings mostly hyaline in the male. Legs stout; hind tibiæ with four rather small spurs.

1. DARITIS THETIS.

Mas. et fœm. *Obscure fusca; antennæ nigræ; thorax utrinque macula postice attenuata alba-flavo marginata; abdomen rufum, nigro trivittatum; coxæ flavo maculatæ; femora flavo vittata; alæ anticæ gutta basali rufa, macula antica alba, vittaque discali alba apicem versus triramosa.* Mas.—*Alæ posticæ limpidæ, margine, ochraceo, ocellis cyaneis nigro marginatis.* Fem.—*Alæ posticæ luteæ, margine ochraceo, ocellis cyaneis nigro marginatis.*

Euprepia Thetis, *Klug, Neure Schmett.* 6, 4, f. 1, 2.

a. Mexico. Presented by Miss Burrell.
b. Mexico. From M. Hartweg's collection.

2. DARITIS MARGINALIS.

Obscure fusca; thorax fascia antica interrupta flava; abdomen rufum, basi vittisque tribus fuscis, subtus flavum; alæ anticæ fascia lata antice furcata maculaque antica contigua flavis, strigisque basi rufis; posticæ luteæ fasciis duabus nigris, una submarginali, altera marginali cyaneoque maculata.

Dark brown. Thorax in front with an interrupted pale yellow band. Pectus with a few white hairs at the base of the wings. Abdomen red, dark brown at the base, with three dark brown stripes, the lateral pair interspersed with yellow hairs; under side yellow. Fore wings beyond the middle with a broad yellow band, which is forked in front, and between the forks there is a somewhat rounded yellow spot; base with red streaks, which are most apparent beneath where there is a tuft of testaceous hairs very near the base. Hind wings luteous, with black veins and with two black bands, the first slender and submarginal, the second broader and marginal, and containing a row of blue spots; towards the disk there is a black streak, and between it and the first black band on the under side are three pale yellow spots. Legs partly clothed with yellow hairs. Length of the body 11 lines; of the wings 34 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 7. ALOPE.

Corpus mediocriter latum. Proboscis capitis latitudine paullo longius. Palpi breviusculi; articulus 2us 1o æqualis; 3us minimus. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ simplices.

Body moderately broad. Proboscis a little longer than the breadth of the head. Palpi rather short; second joint as long as the first; third very small. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings broad. Fore wings with the second inferior vein rather nearer to the first than to the third; third more than six times further from the fourth than from the second. Inferior veins of the hind wings like those of the fore wings. *Male.*—Antennæ slightly pectinated. *Fem.*—Antennæ simple. Allied to *Deiopeia*.

A. Alæ anticæ ocellatæ. - - - -	ocellifera, *Walk.*
B. Alæ anticæ non ocellatæ.	
A. Thorax totus fuscus.	
a. Alæ posticæ non fasciatæ. - -	semicincta, *Walk.*
b. Alæ posticæ fasciatæ. - - -	Mopsa, *Drury.*
B. Thorax antice coccineus. - -	Sangarida, *Cram.*

1. ALOPE OCELLIFERA.

Fusca; palpi subtus lutei; thorax et alæ anticæ maculis plurimis nigro-fuscis testaceo marginatis; abdomen rufum aut flavum, trifariam nigro maculatum; alæ posticæ rufæ aut flavæ, fasciis macularibus nigro-fuscis.

Brown. Palpi luteous beneath. Thorax and fore wings with numerous blackish brown spots, which have testaceous borders. Abdomen red or yellow, with three rows of black spots. Coxæ partly luteous. Hind wings red or yellow, with irregular macular blackish brown bands. The spots on the thorax vary in number, and are in some cases wholly wanting. The spots on the fore wings form about six irregular oblique bands of alternate large and small spots, and vary much in size and form. The hind wings have three bands; the first and second are very rarely entire, generally macular, and in some cases nearly or wholly wanting. The third band is broader, and more often entire. Length of the body 5—10 lines; of the wings 14—28 lines.

a—d. North India. From Mr. L. James' collection.
e. North India. From Mr. Stevens' collection.
f, g. Silhet. From the Rev. J. Stainforth's collection.
h, i. Ceylon. Presented by R. Templeton, Esq.
j—l. Canara, Malabar Coast. Presented by S. N. Ward, Esq.

2. ALOPE SEMICINCTA.

Fœm. *Nigro-fusca; caput supra, thoracisque latera testacea; abdomen rufum vitta maculari nigra, subtus nigrum fasciis rufis; alæ anticæ macula fasciaque maculari albis; posticæ rufæ, fusco marginatæ.*

Fem. Blackish brown. Head testaceous above. Palpi and antennæ black. Thorax testaceous on each side. Abdomen red, with a stripe of black dorsal spots; under side black, with red bands on the borders of the segments. Fringes of the wings with testaceous dots. Fore wings with a white spot a little before the middle, and at one-third of the breadth from the costa, and with a macular oblique white band, which is at two-thirds of the length of the wing, and is more or less interrupted in the middle. Hind wings red, with broad brown borders. Length of the body 8—9 lines; of the wings 22 lines.

a, b. North India. From Mr. L. James' collection.

3. ALOPE? SANGARIDA.

Obscure fusca; thorax antice coccineus; alæ albo ciliatæ; anticæ fascia albida; posticæ fasciis duabus fasciam brevem atram amplectentibus coccineis.

Phalæna Sangarida, *Cram. Pap. Exot.* iv. 181, 381, f. D.
Ceylon.

4. ALOPE? MOPSA.

Alæ anticæ fuscæ, fascia recta subapicali; posticæ sanguineæ, basi, fascia media undata, marginequè nigris.

Phalæna (Noctua) Mopsa, *Drury, App.* iii. *Ill. Exot. Ins.* iii. 4, pl. 3, f. 3.
Callimorpha? Mopsa, *Westw. Ed. Drury*, iii. 4, pl. 3, f. 3.
Madras.

Genus 8. TINOLIUS.

Corpus cylindricum, gracile. Proboscis capitis latitudine multo longior. Palpi ascendentes, mediocriter longi; articulus 2us lo multo longior; 3us parvus, conicus. Pedes longiusculi; tibiæ anticæ subtus fasciculatæ, posticæ calcaribus quatuor longis. Alæ latæ. *Mas.*—Antennæ pectinatæ. Abdomen alas posticas vix superans. *Fœm.*—Antennæ simplices. Abdomen brevius.

Body cylindrical, slender. Proboscis much longer than the breadth of the head. Palpi ascending, moderately long, clothed with very short hairs; second joint much longer than the first; third minute, conical. Legs rather long; fore tibiæ fasciculate beneath; hind tibiæ with four long spurs. Wings broad. Fore wings with the second inferior vein nearer to the first at the base than the third is to the second; fourth about four times further from the third than the third is from the second. *Male.*—Antennæ pectinated, about half the length of the body; branches moderately broad. Abdomen hardly extending beyond the hind wings. *Fem.*—Antennæ simple, minutely setose beneath. Abdomen not extending so far as the hind wings.

1. TINOLIUS EBURNEIGUTTA.

Roseus; thorax nigro sexmaculatus; abdomen fasciis interruptis nigris; pedes nigro varii; alæ anticæ rufo-cervinæ, guttis niveis, posticæ marginibus latis rufo-cervinis.

Rose colour. Proboscis piceous. Antennæ brown, rosy at the base. Thorax with three black spots on each side. Abdomen with an interrupted black band on each segment, and with red crests on the segments towards the base, the basal tuft black on each side. Knees and tibiæ with black spots; tarsi testaceous, with black tips. Fore wings reddish fawn colour, rosy along the costa, with six bright

white dots; first at the base, very small; second and third on the inner border; fourth near the costa before one-third of the length; sixth close behind the fifth, which is near the costa before two-thirds of the length, and varies much in size. Hind wings rosy, with broad reddish fawn-colour borders. Length of the body 6—9 lines; of the wings 20—24 lines.

a, *b*. Ceylon. Presented by R. Templeton, Esq.
c. Malabar Coast. Presented by S. N. Ward, Esq.
d, *e*. East Indies. From Archdeacon Clark's collection.
f. Silhet. From the Rev. J. Stainforth's collection.

Genus 9. AMMALO.

Mas. Corpus cylindricum, longiusculum. Proboscis corporis dimidio brevior. Palpi ascendentes, longiusculi; articulus 2us arcuatus, 1o multo longior; 3us conicus, minimus. Antennæ corporis dimidio breviores, vix pectinatæ. Abdomen alas paullo superans. Sexualia parva, occulta. Pedes mediocriter longi; tibiæ posticæ calcaribus quatuor parvis. Alæ longæ, mediocriter latæ, subacuminatæ; anticæ costa subconvexa.

Male. Body cylindrical, rather long. Proboscis less than half the length of the body. Palpi ascending, rather long; second joint curved, very much longer than the first; third conical, very minute. Antennæ more than half the length of the body, very minutely pectinated. Abdomen extending a little beyond the hind wings. Sexualia small, concealed. Legs moderately long; hind tibiæ with four small spurs. Wings long, moderately broad, slightly acuminated. Fore wings slightly convex in front; discal fold distinct; second inferior vein very near the first at the base, a little further from the second; third more than six times further from the fourth than from the second. Hind wings with the inferior veins very much like those of the fore wings in structure.

1. Ammalo fervidus.

Luteus; pectus rufescens; abdomen supra luteo-testaceum, fasciis fuscis; pedes pallide fusci, femoribus tibiisque subtus rufescentibus; alæ anticæ luteo-testaceæ, maculis luteis cinereo marginatis bifasciatæ; posticæ rufescentes. Var. *Alæ anticæ fusco subnebulosæ.*

Luteous. Proboscis tawny. Palpi reddish on the outer side. Antennæ brown, testaceous above. Pectus reddish. Abdomen above lutescent testaceous, with brown bands. Legs pale brown; femora and tibiæ reddish beneath. Fore wings lutescent testaceous,

luteous at the base, and with several rather large indistinct grayish bordered spots, which form two oblique irregular and incomplete bands; under side and hind wings more reddish. Length of the body 9—10 lines; of the wings 28—32 lines.

Var. β. Fore wings almost wholly but indistinctly mottled with pale brown.

a. ———? From Mr. Milne's collection.
b, c. ——?

2. Ammalo Helops.

Ochraceus; abdomen fasciis nigris; alæ anticæ fuscæ, maculis discalibus anticis luteis, basi plagisque duabus maximis exterioribus rufescentibus; posticæ fascia lata subtestacea.

Phalæna Bombyx Helops, *Cram. Pap. Exot.* i. 113, pl. 72, f. C.
Pelochyta Helops, *Hübn. Verz. Schmett.* 172, 1773.

Surinam.

Genus 10. NEMEOPHILA.

Palpi brevissimi; articuli subglobosi, 1us 2o paullo longior, 3us paullo minor. Proboscis distincta, brevissima. Antennæ *maris* subbipectinatæ, *fœminæ* serratæ et ciliatæ. Corpus gracile. Thorax non cristatus. Abdomen annulatum. Alæ opacæ, dense squamosæ. Pedes sat breves; tibiæ anticæ intus spina armatæ, posticæ apice calcaratæ.

Nemeophila, *Steph. Ill. Brit. Ent. Haust.* ii. 72. *Westw. & Humph.*
Phalæna Bombyx, p., *Linn. Berk.; Don.; Stew.; Turt.*
Bombyx, p., *Fabr.; Wien. Verz.; Borkh.; Haw.*
Phalæna, p., *Scop.*
Arctia, p., *Schr.*
Phalæna, p., *Scop.; Wilkes.*
Parasemia, *Hübn. Verz. Schmett.* 181; *Steph. Cat. Brit. Lep.* 54.

1. Nemeophila Plantaginis.

Prothorax, scapulæ, abdominis margines et alæ posticæ in mare *flava aut alba, in* fœmina *coccinea; alæ anticæ nigræ rivulis flavis, ciliis flavo variegatis; posticæ margine maculisque nigris.*

Phalæna Bombyx Plantaginis, *Linn. Syst. Nat.* ii. 820, 42; *Faun. Suec.* 301, 1132; *It. Goth.* 273. *Gmel. ed. Syst. Nat.* i. 5, 2421, 42. *Berk. Syn.* i. 135. *Don. Hist. Nat. Brit. Ins.* iv. 69, pl. 134. *Stew. El. Nat. Hist.* ii. 150. *Turt. Syst. Nat.* iii. 221.

——— ———, *Roes. Ins.* iv. pl. 24. *Geoffr. Ins.* ii. 109, 10. *Schæff. Icon.* pl. 92, f. 5—7.

Phalæna Plantaginis, *Wilkes, Pap.* 24, pl. 50.

Bombyx Plantaginis, *Fabr. Sp. Ins.* ii. 196, 115; *Mant. Ins.* ii. 127, 163; *Ent. Syst.* iii. 1, 466, 186. *Wien. Verz.* 53, E. 4. *Oliv. Enc. Méth.* v. 88, 217. *Borkh. Schmett.* iii. 178, 52; *Rhein. Mag.* i. 338, 172. *Esp. Schmett.* iii. pl. 36. *Illiger, N. Auss. dess.* i. 81, 4. *Mag.* ii. 47, 4. *Schæff. Icon. Nomencl. Panz.* 104. Var. *Hospita*, 135, pl. 136, f. 1, 2. *Panz. Faun. Germ.* 16, 22. *Fuessl. Schweiz. Ins.* 35, 658. *N. Mag.* ii. 375. *Müll. Faun. Fridr.* 41, 372. *Zool. Dan.* 118, 1361. *Schr. Faun. Boic.* ii. 1, 259, 1433. *Vieweg, Tab. Verz.* i. 58, 56. *Lang. Verz.* ii. 89, 688—692; 90, 693, 694. *Brahm. Ins. Kal.* 244, 139. *Schwarz, Raup.* 4, 27, 221, 377, 644, 754. *Petagna. Haw. Lep. Brit.* 94. *Hübn. Bomb.* pl. 29, f. 126—128; pl. 55, f. 238; *Larv. Lep.* iii. *Bomb.* ii. *Veræ, K. a.*, f. a—d. *Treits. Hulfsb. Schmett.* 220, 95.

Phalæna apicola, *Scop. Ent. Carn.* 205, 507.

Bombyx hospita, *Wien. Verz. App.* 310. *V. Müll. Faun. Siles.* iii. 1. *Borkh. Schmett.* iii. 470.

Arctia Plantaginis, *Schr. Faun. Boic.* ii. 2, 152, 4. *Latr. Gen. Crust. et Ins.*

Eyprepia Plantaginis, *Ochs. Schmett. Eur.* iv. 312, 7.

Var. β. *Steph. Ernst, Pap.* iv. pl. 147, f. 192, b.

Bombyx hospita, *Wien. Verz.* 310; *Borkh. Eur. Schmett.* iii. 470.

Var. γ. *Steph. Ernst, Pap.* iv. pl. 147, f. 192, a.

Phalæna alpicola? *Scop. Ent. Carn.* 507.

Var. δ. *Steph. Ernst, Pap.* iv. pl. 145, f. 191, f.

Var. ε. *Steph. Ernst, Pap.* iv. pl. 146, f. 191, p.

Nemeophila Plantaginis, *Steph. Ill. Brit. Ent. Haust.* ii. 72, 1. *Westw. & Humph. Moths*, i. 76, pl. 19, f. 14, 15.

Parasemia Plantaginis, *Hübn. Verz. Schmett.* 181, 1870. *Steph. Cat. Brit. Lep.* 54.

Chelonia Plantaginis, *God. Pap. de France*, iv. 320, 98, pl. 23, f. 2—4.

Callimorpha Plantaginis, *Meig. Handb.* 140, 90, pl. 11, f. 3; *Syst. Beschr. Eur. Schmett.* iii. 29, 6, pl. 84, f. 3, *Speyer, Ent. Zeit. Stett.* xiii. 286, 9.

Var. Callimorpha Hospita, *Speyer, Ent. Zeit. Stett.* xiii. 287.

Var. Callimorpha matronalis, *Speyer, Ent. Zeit. Stett.* xiii. 287.
a. England. Presented by H. Doubleday, Esq.
b, c. England.
d—t. England. From Mr. Stephens' collection.
v—x. Europe. From M. Becker's collection.
y. ———?

2. Nemeophila Caucasica.

Atra; prothorax totus et costa rubra; maculæ flavæ discretæ latiores; alæ posticæ subangulatæ.

Nemeophila Caucasica, *Ménétries, Catal. Zool. Caucas. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 147, 28, 13.
Nemeophila Plantaginis, *Var., Boisd. Gen. et Ind. Méth. Eur. Lep.* 62, 508.

Caucasus.

North America.

A. Alæ anticæ albo variæ.
A. Alæ posticæ rufæ, nigro maculatæ. - - figurata, *Drury.*
B. Alæ posticæ nigro-fuscæ, flavo maculatæ. Californiæ, *Walk.*
B. Alæ anticæ supra totæ nigro-fuscæ. - - petrosa, *Walk.*

2. Nemeophila figurata.

Alæ anticæ nigræ; fascia longitudinali duabus alteris convergentibus connexa, albis; posticæ sanguineæ margine maculaque externa nigris.

Phalæna (Bombyx) figurata, *Drury, Ins. Exot.* ii. 22, pl. 12, f. 4. App. ii. *Pal. Beauv. Ins. Afr. et Amer. Lep.* pl. 24, f. 4.
Nemeophila figurata, *Westw. Drury*, ii. 23, pl. 12, f. 4.
Euplagia Ceramica, *Hübn. Verz. Schmett.* 180, 1862.

Virginia.

3. Nemeophila Californiæ.

Nigro-fusca; thoracis latera albido vittata; alæ anticæ subtus flavo bifasciatæ; posticæ vitta maculisque flavis.

Male. Blackish brown. Head whitish beneath. Antennæ black. Thorax with a whitish stripe on each side from the head to the base of the fore wing. Femora with red stripes. Fore wings beneath with two broad yellow bands, the first shortened behind, the second divided in front. Hind wings with two discal yellow spots,

and with a yellow angular submarginal stripe; fringe partly yellow; the yellow part beneath is more diffuse, and occupies most of the surface. *Fem.*—Blackish brown. Head white beneath. Palpi with white stripes on the inner side. Antennæ black. Thorax between the head and the fore wings with two lateral white stripes, which are broader than those of the male, and have a reddish tinge in front. Abdomen with a row of red spots along each side, and with white bands beneath. Fore wings beneath with a yellow disk, which is mostly bordered with red, and is interrupted in the middle by a brown band. Hind wings with a short brown discal stripe, and with brown borders which contain some yellow spots, and on the under side are varied with red. Length of the body 5—6 lines; of the wings 12—14 lines.

a, *b*. California. From M. De Latre's collection.

4. Nemeophila petrosa.

Nigro-fusca; thorax luteo bimaculatus; abdominis latera luteo vittata; alæ anticæ vitta basali fasciaque maculaque albis.
Mas.—*Alæ anticæ, albæ vittis duabus marginibusque fuscis.*
Fœm.—*Alæ posticæ vitta undulosa submarginali flava.*

Male. Blackish brown. Palpi mostly clothed with yellow hairs. Thorax with a luteous spot on each side in front. Sides of the abdomen with a white mark on each segment above, and with a luteous one beneath; tip luteous; apical appendages tawny. Legs with white stripes. Fore wings with a white discal stripe, which extends near the hind border to a little beyond half the length; beyond it is an oblique white band, whose inner side is undulating and almost touches the tip of the stripe; near it in the middle of the length of the wing, and towards the fore border, there is a white spot; costa with a luteous streak at the base. Hind wings white, with two brown stripes proceeding from the base to the middle, and with brown borders. *Fem.*—Blackish brown. Palpi clothed with black hairs. Thorax with a luteous spot on each side in front. Abdomen with a luteous stripe on each side. Fore femora with a short luteous streak on each. Fore wings with a short white streak extending in the disk from the base, and beyond the middle with a white band corresponding to that of the male, yellow towards the costa, forked towards the hind border; between it and the tip there is a small curved white mark. Hind wings with a yellow undulating irregular submarginal stripe; costa with a luteous streak at the base. Length of the body 6 lines; of the wings 14 lines.

This species is much more nearly allied than *N. Californiæ* to the typical *N. Plantaginis*.

a, *b*. Rocky Mountains. Presented by the late Earl of Derby.

Genus 11. PHAOS.

Mas. Corpus sat gracile. Proboscis brevis. Palpi breves, pilosi; articulus 3us minimus. Antennæ pectinatæ, ramis subclavatis, mediocriter longis. Abdomen lineare, alas posticas non superans. Alæ anticæ angustæ, triangulares. Pedes mediocriter validi; tibiæ anticæ apud medium calcaratæ, posticæ quadricalcaratæ.

This genus seems to connect *Nemeophila* with the *Lithosiidæ*.

Male. Body rather slender. Head and thorax clothed with short hairs. Proboscis short. Palpi short, hairy; third joint very small. Antennæ more closely pectinated than in *Nemeophila*; branches subclavate, of moderate length. Abdomen linear, extending nearly as far as the hind wings, with short hairs; sides with small tufts of hairs. Fore wings narrow, triangular, straight along the costa; outer border slightly oblique and convex; hind angle obtuse and rounded; first, second and third inferior veins very near together at the base; fourth full four times further from the third than the third from the first. Hind wings much broader than the fore wings, and about two-thirds of their length. Legs moderately stout; fore tibiæ armed with a long spur in the middle beneath, and with a short spur at the tip above; hind tibiæ with four spurs of moderate length.

1. PHAOS INTERFIXA.

Nigra; thorax cano trivittatus; abdomen rufum, vitta dorsali maculari nigra, subtus flavum, e maculis nigris trivittatum; femora supra rufa; alæ anticæ maculis plurimis testaceis, vittaque basali rufa; posticæ luteæ, vitta lata marginali nigra luteo guttata.

Black. Head clothed with hoary hairs, and on each side between the eyes and on the vertex with black hairs. Thorax with a band in front and with three stripes of hoary hairs. Abdomen red, with a dorsal row of black spots; under side pale yellow, with three rows of black spots. Fore wings full of pale testaceous spots, some of them more or less tinged with luteous, and at the base with a short costal red stripe; the spots are smaller and more numerous

towards the tips of the wings; under side luteous, with a black spot beyond the middle near the costa, and with a broad black apical band, which is intersected by a deeply serrated testaceous band. Hind wings luteous, blackish at the base, with a black subcostal spot, and with a broad black marginal stripe, which contains two or three luteous spots and is submarginal beneath. Legs mostly covered with testaceous tomentum; femora red above. Length of the body 4—5 lines; of the wings 12—14 lines.

a, *b*. Van Dieman's Land. Presented by R. Butler, Esq.
c, *d*. Van Dieman's Land. Presented by Morton Allport, Esq.
e—*g*. Van Dieman's Land. From Mr. A. J. Smith's collection.

Genus 12. PHRAGMATOBIA.

Caput et thorax pilis longis hirta. Palpi breves, vix distincti, pilosissimi; articulus 1us 2i longitudine sed crassior; 3us 2o brevior, ovatus, obtusus. Proboscis subspiralis. Antennæ breves, ciliatæ, *maris* serratæ, *fœminæ* simplices. Thorax crassus. Abdomen maculatum. Tibiæ anticæ inermes, posticæ quadricalcaratæ posticæ vena 5a conspicua. Alæ subdiaphanæ, squamis rarioribus adspersæ.

Phragmatobia, *Steph. Ill. Brit. Ent. Haust.* ii. 73; *Herr.-Schæff.*
Phalæna Bombyx, p., *Linn.; Berk.; Don.; Stew.; Turt.*
Phalæna, p., *Wilkes.*
Noctua, p., *Haw.*
Arctia, *Hübn. Verz. Schmett.* 181; *Boisd.*

1. PHRAGMATOBIA FULIGINOSA.

Alæ anticæ rufo-fuliginosæ, puncto gemino nigro; posticæ rubræ, maculis marginalibus nigris; abdomen serie triplici macularum nigrarum.

Phragmatobia fuliginosa, *Steph. Ill. Brit. Ent. Haust.* ii. 14, 1. *Westw. & Humph. Moths*, i. 93, pl. 19, f. 1, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. 142, 6, 2. *Speyer, Ent. Zeit. Stett.* xiii. 315, 24.
Phalæna Noctua fuliginosa, *Linn. Syst. Nat.* ii. 836; *Faun. Suec.* 1159. *Scop. Ent. Carn.* 508. *Berk. Syn.* i. 139. *Donov. Nat. Hist. Brit. Ins.* iii. 21, pl. 80. *Stew. El.* ii. 159. *Turt. Syst. Nat.* iii. 236.
Phalæna Bombyx fuliginosa, *Gmel. ed. Syst. Nat.* i. 5, 2444, 95.

Bombyx fuliginosa, *Fabr. Sp. Ins.* ii. 206, 154; *Mant. Ins.* ii. 133, 215; *Ent. Syst.* iii. 1, 486, 246. *Oliv. Enc. Méth.* v. 103, 270. *Wien. Verz.* 54, E, 11. *Borkh. Schmett.* iii. 198, 60. *Rhein. Mag.* i. 340, 178. *Esp. Schmett.* iv. 56, pl. 86, f. 1—5. *Hübn. Bomb.* pl. 33, f. 143. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K, e, fig. 2. *Illig. N. Ausg. dess.* i. 88, 11. *Schæff. Icon. Nomencl. Panz.* 53, pl. 37, f. 7, 8. *Panz. Faun. Germ.* 7, 16. *Fuessl. Schweiz. Ins.* 37, 696. *N. Mag.* iii. 2, 144, 12. *Müll. Faun. Fridr.* 43, 381. *Zool. Dan.* 120, 1382. *Vieweg, Tab. Verz.* i. 62, 65. *Rossi, Faun. Etr.* ii. 177, 1104; *Ed. Illig.* 283, 1104. *Lang. Verz.* ii. 92, 716—718. *Brahm, Ins. Kal.* 30, 10; 189, 96. *Schwarz, Raup.* 10, 274, 534, 761. *Treits. Hulfsb. Schmett.* 226, 106.

Phalæna fuliginosa, *Hufnagel, Pl. Berl. Mag.* iii. 2, 206, 4. *Wilkes*, 23, pl. 49.

——— ———, *Rai, Ins.* 228, 13. *Harr. Aur.* pl. 27, f. 1—n.; *Exp.* pl. 8, f. 7. *Röes. Ins.* i. pl. 43. *Uddm. Diss.* 76. *Ammiral, Ins.* pl. 30. *Sepp. Necderl. Ins.* ii. pl. 36, f. 1—8. *Ernst, Pap. d'Eur.* iv. 150, pl. 154, f. 200; pl. 155, f. 200.

Noctua fuliginosa, *Haw. Lep. Brit.*

Arctia fuliginosa, *Hübn. Verz. Schmett.* 183, 1880. *Latr. Gen. Crust. et Ins.*

Eyprepia fuliginosa, *Ochs. Schmett.* iii. 346, 24; iv. 61, 25.

Chelonia fuliginosa, *God. Pap. de France*, iv. 351, 109, pl. 36, f. 4.

Callimorpha fuliginosa, *Meig. Handb.* 144, 103; *Syst. Beschr. Eur. Schmett.* iii. 42, 7, pl. 85, f. 4.

a—*n*. England, From Mr. Stephens' collection.
o. England.
p, *q*. Lapland. Presented by F. Walker, Esq.
r. Nice. From Dr. Leach's collection.
s—*u*. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

The North American specimens are generrlly smaller than the European, and have darker hind wings.

2. Phragmatobia placida.

Abdominis dorsum purpureum, striga dorsali pectinata, lateribusque nigris; alæ anticæ macula media purpurea.

Phragmatobia placida, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 142, 6, 2.

Europe.

North America.

A. Alæ posticæ nigræ. - - - - - vagans, *Boisd.*
B. Alæ posticæ rufæ. - - - - - assimilans, *Walk.*

3. PHRAGMATOBIA VAGANS.

Murina vel cinereo-lutescens; alæ anticæ immaculatæ; posticæ nigræ, fimbria cinereo-lutescente; omnes subtus cinereæ lunula nigra.

Arctia vagans, *Boisd. Ann. Soc. Ent. Fr.* 2me *Sér.* x. 322, 92.

North California.

4. PHRAGMATOBIA ASSIMILANS.

Mas. *Rufa; antennæ testaceæ; alæ anticæ nigro biguttatæ, posticæ triguttatæ.*

Var. β. *Alæ anticæ fere totæ fuscæ, posticæ vitta lata submarginali nigricante.*

Male. Red. Antennæ testaceous. Thorax with brown hairs. Wings red; veins darker. Fore wings slightly brown along the costa and elsewhere, indistinctly sprinkled with pale brown, with two blackish dots, one at the base of the anterior inferior veins, the other between the first and the costa. Hind wings brighter red, with three black dots, two in the disk, and one near the hind border towards the inner angle. Length of the body 6 lines; of the wings 16 lines.

Var. β. Fore wings almost wholly brown. Hind wings with a broad blackish submarginal stripe.

a, *b*. United States. Presented by E. Doubleday, Esq.

Mexico.

5. PHRAGMATOBIA ALBICOSTA.

Nigro-fusca; thorax fascia antica alba; coxæ anticæ rufo vittatæ; alæ anticæ costa alba. Mas.—*Abdomen supra fasciis subinterruptis rufis.* Fœm.—*Abdomen supra rufum guttis dorsalibus nigris.*

Male and female. Blackish brown. Proboscis piceous. Antennæ black. Thorax in front with a white band, which is most apparent on each side. Fore coxæ with red stripes. Costa of the fore wings white. *Male.*—Abdomen above with red half interrupted bands;

tip thickly tufted with white hairs. *Female.*—Abdomen above bright red, with black dorsal dots; tips white? Length of the body 6—7 lines; of the wings 18—20 lines.

a, *b*. Mexico. From M. Hartweg's collection.

Asia.

A. Alæ anticæ nigro quadrimaculatæ. - - montana, *Guér.*
B. Alæ anticæ nigro unimaculatæ. - exclamationis, *Kollar.*

6. PHRAGMATOBIA MONTANA.

Alæ anticæ obscure fuscæ et nigro subundatæ; subtus pallido rubræ, margine obscuriores maculis duabus nigris; posticæ livido flavescentes, maculis quatuor nigris; caput et thorax obscure fusca; antennæ pectinatæ; abdomen supra rubrum, in medio fusco lineatum, subtus fuscum punctis lateralibus nigris; pedes fusci, femoribus supra rubris.

Arctia montana, *Guér. Voy. Delessert, Hist. Nat.* 92, pl. 26, f. 3.

Neelgherry Mountains.

7. PHRAGMATOBIA EXCLAMATIONIS.

Fuliginoso rubens; thorax et abdomen pilis longioribus et densioribus; alæ anticæ medio signo nigro.

Euprepia exclamationis, *Kollar, Kaschmir von Hugel*, 469, 9.

Himalaya Mountains.

Genus 13. APANTESIS.

Fœm. Corpus fusiforme. Caput parvum. Proboscis brevis. Palpi pilosi, porrecti; articulus 3us conicus, parvus. Antennæ subpectinatæ. Thorax pilis adpressis. Abdomen alas posticas triente superans. Pedes validiusculi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ anticæ angustæ, subfusiformes, costa subconvexa.

Fem. Body fusiform, clothed with close smooth hairs. Head small. Head and thorax clothed with short hairs, lying close and smooth. Proboscis short. Palpi hairy, porrect; third joint conical, small. Antennæ minutely pectinated. Abdomen with very short hairs, extending to one-third of its length beyond the hind wings.

Fore wings narrow, subfusiform, slightly convex along the costa; outer border slightly oblique and convex; hind angle very obtuse and much rounded; first, second and third inferior veins very near together at the base; fourth thrice further from the third than the third from the first. Hind wings rather broader than the fore wings and hardly two-thirds of the length. Legs moderately stout; hind tibiæ with four spurs of middling length.

1. APANTESIS RADIANS.

Fœm. *Obscure fusca; caput supra luteum; thorax luteo bivittatus; abdomen supra luteo bivittatum, basi testaceum; alæ anticæ marginibus interruptis strigaque discali testaceis; posticæ basi rufæ.*

Fœm. Dark brown. Head clothed above with luteous hairs. Proboscis testaceous. Antennæ black. Thorax in front luteous with two brown stripes; middle part with two luteous stripes. Abdomen above testaceous towards the base and with two luteous stripes. Fore wings with testaceous borders, excepting the apical third part of the costal margin; a discal testaceous streak, extending from the base along one-fourth of the length of the wing, forked at its tip. Hind wings red towards the base; the outline of the red part very angular. Fore femora with a luteous spot on each. Length of the body 5 lines; of the wings 12 lines.

a. Georgia. From Mr. Milne's collection.

Genus 14. MAZÆRAS.

Mas. Corpus longum, validum, cylindricum. Proboscis corporis dimidio brevior. Palpi ascendentes, longiusculi; articulus 2us arcuatus, 1o multo longior; 3us conicus, minimus. Antennæ mediocriter pectinatæ, corporis dimidio non longiores. Abdomen alas posticas longe superans. Pedes validi, longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ, sat longæ.

Male. Body long, stout, cylindrical. Proboscis less than half the length of the body. Palpi ascending, rather long; second joint curved, very much longer than the first; third conical, very minute. Antennæ moderately pectinated, hardly half the length of the body. Abdomen extending far beyond the hind wings. Legs stout, rather long; hind tibiæ with four long spurs. Wings rather long and narrow. Fore wings nearly straight in front; discal fold very distinct; first and second inferior veins nearly contiguous at the base; second about six times further from the third than from the first; third further from the fourth than from the second.

1. MAZÆRAS CONFERTA.

" Mas. *Saturate rufa ; palpi apice nigri ; antennæ nigræ ; thorax ocello discali, maculisque quatuor nigris ; abdomen luteum, e maculis nigris trivittatum ; tibiæ tarsique nigra ; alæ anticæ fuscæ maculis rufis strigisque transversis testaceis.*

Male. Deep red. Proboscis tawny. Palpi with black tips. Antennæ black. Thorax with a black ocellus in the disk, and with four black spots, one near the base of each wing. Abdomen luteous, with three dorsal stripes of large black spots. Tibiæ and tarsi black. Fore wings brown above, with two or three red spots at the base, with one in the discal areolet, and with many minute transverse testaceous streaks; under side reddish, brown in front and towards the tips. Hind wings red; under side brown in front and towards the tips. Length of the body 11 lines; of the wings 30 lines.

a. Brazil. Presented by W. W. Saunders, Esq.

Genus 15. GIPPIUS.

Mas. Corpus crassum. Proboscis mediocriter longa. Palpi sat longi, subascendentes; articulus 2us 1o valde longior; 3us longiconicus, gracilis. Antennæ serratæ, subsetosæ. Abdomen apice fasciculatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ; anticæ posticis valde longiores.

Male. Body very stout. Proboscis moderately long. Palpi moderately long, very slightly ascending, extending a little beyond the head, clothed with very short hairs; second joint very much longer than the first; third elongate-conical, slender, about one-fourth of the length of the second. Antennæ serrate and minutely setose beneath. Abdomen tufted at the tip. Legs stout; hind tibiæ with four long spurs. Wings narrow. Fore wings very much longer than the hind wings; first and second inferior veins contiguous at the base; third as far from the second as the fourth is from the third. Hind wings extending rather beyond half the length of the abdomen.

1. Gippius sumptuosus.

Atra; caput, prothorax et pedes coccineo hirta; palpi fulvi, subtus nigri; thorax fascia antica vittisque quatuor luteis; abdomen e guttis luteis bivittatum, fasciis duabus subtus apiceque coccineis; alæ flavo guttatæ, posticæ subtus gutta basali rufa.

Deep black. Head crimson about the eyes and with a triangular crimson spot on the vertex. Palpi tawny, black beneath. Prothorax with crimson hairs. Thorax with a luteous band in front, from whence four luteous stripes proceed hindward, and there have a crimson hue. Abdomen above with two rows of luteous dots; two stripes on the under side and tip crimson. Legs, except the tarsi, thickly clothed with black and crimson hairs. Fore wings with many yellow dots, which occupy the whole breadth for more than one-third of the length, and thence extend along the fore border and along the hind border nearly to the tips. Hind wings with yellow dots along the borders, and with one or two in the disk near the base; under side with a red dot on the hind border near the base. Length of the body 6 lines; of the wings 16 lines.

a. Honduras. Presented by E. Doubleday, Esq.

Genus 16. GLANYCUS.

Fœm. Corpus crassum, breve. Proboscis breviuscula. Palpi sat parvi; articulus 2us 1o multo longior; 3us longiconicus. Antennæ graciles, simplices. Abdomen alas posticas triente superans. Pedes sat validi; tibiæ posteriores subciliatæ; tibiæ posticæ calcaribus minimis apicalibus. Alæ anticæ angustæ, posticis duplo longiores. Alæ posticæ breviusculæ, latiusculæ, costa basi convexa, margine postico undulato.

Fœm. Body thick, short. Proboscis rather short. Palpi rather small; second joint much longer than the first; third elongate-conical. Antennæ slender, simple. Abdomen extending for about one-third of its length beyond the hind wings. Legs rather stout; hinder tibiæ slightly ciliated; hind tibiæ with very minute apical spurs. Fore wings narrow, about twice the length of the hind wings; first and second inferior veins nearly contiguous at the base; third very near the second; fourth remote from the third. Hind wings rather short and broad; fore border convex near the base; hind border undulating.

1. GLANYCUS INSOLITUS.

Nigra; thorax coccinco hirtus; abdomen nigro-cyaneum, fascia antica, vitta dorsali fasciisque quatuor posticis coccineis; alæ anticæ fasciis quatuor coccineis strigaque obliqua discali hyalina; posticæ maculis guttisque nigris maculaque discali furcata limpida.

Black. Thorax with crimson hairs. Abdomen blackish blue, with a dorsal crimson stripe, with a crimson band in front, and with four crimson bands towards the tip. Fore wings with four irregular crimson bands, the first at the base, joined in the middle to the second, which is joined in front and near the hind border to the third; the third is joined in like manner to the fourth, which is widened in front; along an indentation on the outer side of the third band there is an oblique hyaline streak. Hind wings crimson, with three very large black spots, one at the base, two in the disk, and with some small black spots along the border; a large forked hyaline spot in the disk. Length of the body $5\frac{1}{3}$ lines; of the wings 15 lines.

a. Silhet. Presented by E. Doubleday, Esq.

Genus 17. DIACRISIA.

Palpi porrecti, mediocres, subpilosi; articulus 1us 2o brevior; 3us sat gracilis, cylindricus. Proboscis distincta brevis. Antennæ sat breves, graciles, *maris* bipectinatæ, *fœminæ* serratæ. Alæ opacæ, dense squamosæ. Thorax haud cristatus. Abdomen annulatum.

Phalæna Noctua, p., *Linn.*
Phalæna Bombyx, p., *Linn.*; *Berk.*; *Don.*; *Ssew.*; *Turt.*
Phalæna, p., *Scop.*
Bombyx, p., *Fabr.*; *Esp.*; *Borkh.*; *Illig.*; *Hübn.*; *Haw.*; *Treits.*
Arctia, p., *Schr.*; *Latr.*; *Meig.*
Hypercompa, p., *Hübn.*
Eyprepia, p., *Ochs*; *Curt.*
Diacrisia, *Hübn. Verz. Schmett.* 169; *Steph. Cat. Brit. Lep.*
Euthemonia, *Steph. Ill. Brit. Ent. Haust.* ii. 68.

1. DIACRISIA RUSSULA.

Alæ anticæ maris *luteæ, limbo sanguineo, lunula fusca;* fœminæ *fulvæ, venis lunulaque rufis; posticæ aurantiacæ fascia marginali fusca.*

Phalæna vulpinaria, *Linn. Syst. Nat. ed.* 10, 520, 136.
Mus. Bombyx Sannio, *Linn. Faun. Suec. ed.* 11, 302, 1135. *Müller, Faun. Fridr.* 42, 373; *Zoöl. Dan.* 119, 1389.
Phalæna Sannio, *Scop. Ent. Carn.* 211, 520.
Fœm. Noctua russula, *Linn. Faun. Suec. ed.* 2, 308, 1156. *Clerck, Icon.* pl. 4, f. 1.
Bombyx russula, *Linn. Syst. Nat.* i. 2, 830, 71. *Gmel. ed. Syst. Nat.* i. 5, 2436, 71. *Fabr. Sp. Ins.* ii. 194, 111: *Mant. Ins.* ii. 127, 159; *Ent. Syst.* iii. 1, 464, 180. *Oliv. Enc. Méth.* v. 85, 213. *Schæff. Icon. Nomencl. Panz.* 96, pl. 83, f. 4, 5. *Esp. Schmett.* iii. 337, pl. 67, f. 2—7. *Berk. Syn.* i. 138. *Don. Nat. Hist. Brit. Ins.* vi. 81, pl. 214. *Stew. El. Nat. Hist.* ii. 156. *Turt. Syst. Nat.* iii. 220. *Borkh. Eur. Schmett.* iii. 217, 68; *Rhein. Mag.* i. 342, 181. *Fuessl. Schweiz. Ins.* 36, 682; *N. Mag.* iii. 2, 149, 65. *Rossi, Faun. Etr.* ii. 174, 1094; *ed. Illig.* 279, 1094. *Vieweg, Tab. Verz.* i. 61, 64. *Lang, Verz.* ii. 93, 719, 720. *Brahm, Ins. Kal.* 445, 312. *Schwarz. Raup.* 238, 385. *Hübn. Bomb.* 132, 5, pl. 29, f. 124, 125. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, K. a, f. 1, a. *Wien. Verz.* 54. Fam. E. 13. *Illig. N. Ausg. dess.* i. 89, 13. *Treits. Hutfsb. Schmett.* 220, 94.
———·———, *Rai, Ins.* 228, 75. *Robert, Ic.* pl. 30, f. 1. *Schæff. Icon.* pl. 83, f. 4, 5. *Geoff. Ins.* ii. 129, 39. *Kleeman, Beitr.* 172, pl. 20, f. 1—8. *Ernst, Pap. d'Eur.* iv. 153, pl. 155, f. 201, a—i. pl. iv. *Suppl.* f. 201, K. *var.*
Arctia russula, *Schr. Faun. Boic.* ii. 1, 263, 1441; 2, 153, 13. *Latr. Gen. Crust. et Ins. Meig. Handb.* 139, 89; *Syst. Beschr. Eur. Schmett.* iii. 31, 9, pl. 85, f. 1.
Eyprepia russula, *Ochs. Schmett. Eur.* iii. 309, 6; iv. 60, 6. *Curt, Brit. Ent.* i. pl. 21.
Bombyx sannius, *Haw. Lep. Brit.* 133.
Phalæna quadra, *Harris, Vade Mec.* 15.
Euthemonia Russula, *Steph. Ill. Brit. Ent. Haust.* ii. 68, 1.
Diacrisia Russula, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Lithosiæ Diacrisiæ*), 169, 1744. *Steph. Cat. Brit. Lep.* 53.
Nemeophila Russula, *Boisd. Gen. et Ind. Méth. Lép. Eur.* 62, 507.
Chelonia Russula, *God. Pap. de France*, iv. 343, 106, pl. 35, f. 4. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 148, 36, 21. *Speyer, Ent. Zeit. Stett.* xiii. 286, 8.

a—m. England. From Mr. Stephens' collection.
n—p. England.
q—t. Europe. From M. Beckér's collection.

2. DIACRISIA SUBVARIA.

Fœm. *Flava; caput, palpi, antennæ et pectus fusca; caput vitta fusca, subtus rufo pilosum; antennæ subpectinatæ; pectus rufo bivittatum; abdomen e maculis nigris trivittatum subtus rufescens; pedes fusci, rufo vittati; alæ anticæ guttis tribus subcostalibus nigris, maculisque duabus, una rufa, altera fusca; posticæ rufæ, nigro maculatæ.*

Fem. Yellow. Head, palpi, antennæ and pectus brown. Head with a yellow vertical band, clothed beneath, like the palpi, with red hairs. Antennæ minutely pectinated. Pectus with an oblique red stripe on each side. Abdomen with three rows of black spots; under side reddish. Legs brown; femora and tibiæ with red stripes. Fore wings with three black dots near the fore border, one at one-third of the length of the wing, the other two approximate at two-thirds of the length; behind the latter there is a red mark, and adjoining it a pale brown spot, which on the under side is black; fringe of the outer border partly brown; under side mostly red, with two additional brown spots towards the tips. Hind wings red, with some black spots, which are mostly indistinct on the under side. Length of the body 6 lines; of the wings 16 lines.

a. North China. From Mr. Cuming's collection.

The following six genera are aberrant forms of *Arctiidæ*; they are allied to *Spilosoma* and to *Hypercompa*, but have nearly as much affinity to *Dipænæ*, *Encereon*, *Fregella*, and *Rhipha*, four groups of *Euchromia*.

Genus 18. CREATONOTOS.

Mas. et fœm. Corbus robustum. Proboscis capitis latitudine paullo longius. Palpi brevissimi; articulus 3us minimus. Antennæ simplices. Thorax pilis adpressis. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus brevissimis. Alæ longiusculæ; anticæ angustæ.

A. Alæ anticæ vittatæ.
  A. Alæ anticæ vitta interrupta. - - interrupta, *Linn.*
  B. Alæ anticæ vitta integra. - - - emittens, *Walk.*
B. Alæ anticæ guttatæ. - - - - Vuteria, *Cram.*

Creatonotos, *Hübn. Verz. Schmett.* 169.
Phalæna Bombyx, p., *Linn.*; *Gmel.*; *Sulz.*
Bombyx, p., *Fabr.*; *Oliv.*

Male and fem. Body stout. Proboscis a little longer than the breadth of the head. Palpi very short; third joint very small. Antennæ simple. Thorax with the hairs flat and closely applied to the surface. Abdomen extending a little beyond the thorax. Legs slender; hind tibiæ with two very short apical spurs. Wings rather long. Fore wings narrow; second inferior vein almost close to the third, a little further from the first; third full six times further from the fourth than from the first. Hind wings moderately broad; second and third inferior veins united near the base; first near to the second; fourth remote from the third.

1. Creatonotos interrupta.

Pallide carnea; thorax vitta fusiformi nigra; abdominis dorsum coccineum, e maculis nigris trivittatum; tibiæ tarsique nigra; alæ anticæ vitta discali nigra apicem versus oblique interrupta; posticæ albidæ aut cinereæ, nonnunquam maculis submarginalibus nigris.

Phalæna interrupta, *Linn. Syst. Nat. Phal.* 116. *Sulz. Gesch.* 22, 3.

Bombyx Francisca, *Fabr. Mant. Ins.* ii. 131, 200; *Ent. Syst.* iii. 1, 480, 228. *Gmel. Syst. Nat.* i. 5, 2445, 589. *Oliv. Enc. Méth.* v. 100, 260.

Creatonotos interrupta, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*), 170, 1745.

a, b. Nepaul. Presented by Major-Gen. Hardwicke.
c, d. Ceylon. Presented by R. Templeton, Esq.
e, f. North India. From Mr. L. James' collection.
g. East Indies. From Archdeacon Clerk's collection.

2. Creatonotos emittens.

Mas. *Testacea; palpi fusci subtus albidi, basi rufi; abdomen rufum, e maculis nigris univittatum, apice et subtus testaceum; alæ anticæ vitta interrupta discali fusca.*

Male. Testaceous, with a slight saffron tinge. Palpi brown, whitish beneath, red at the base. Antennæ whitish, red at the base; pectinations black. Abdomen red, with a row of black spots, pale testaceous at the tip and beneath. Legs pale testaceous. Fore wings with a reddish tinge along the costa, and with a slender brown discal stripe, which is widely interrupted at two-thirds of the length of the wing; under side much paler. Hind wings pale testaceous. *Fem.?* — White. Palpi and antennæ brown; palpi beneath and antennæ towards the base white. Abdomen above

yellow, with three rows of black spots. Fore wings with a brown discal stripe, which is interrupted towards the tips. Hind wings with a brown discal dot. Length of the body 4—4½ lines; of the wings 10—14 lines.

Var. β, male. Discal stripe of the fore wings much interrupted and almost obsolete. Hind wings with no discal dot, much smaller than *var. a.*

a, b. Ceylon. Presented by R. Templeton, Esq.
c. (*Fem.?*) North India. From Mr. L. James' collection.

3. CREATONOTOS? VUTERIA.

Testacea; alæ anticæ guttis duabus discalibus punctisque marginalibus nigris; posticæ albæ.

Phalæna Vuteria, *Cram. Pap. Exot.* v. 161, pl. 36, f. 5.
Cape.

Genus 19. EVIUS.

Corpus breviusculum. Oculi magni, extantes. Proboscis corporis dimidio vix brevior. Palpi longiusculi, ascendentes; articulus 2us 1o multo longior; 3us minutus, conicus. Antennæ subpectinatæ. Abdomen alas posticas superans. Pedes sat graciles, non longi; tibiæ posticæ calcaribus quatuor minutis. Alæ sat angustæ; posticæ antice convexæ.

Empusa, p., *Hübn.*
Creatonotos, p., *Hübn.*
Automolis, p.? *Hübn.*

Body rather short. Eyes large and prominent. Proboscis nearly half the length of the body. Palpi rather long, ascending; second joint much longer than the first; third minute, conical. Antennæ minutely pectinated beneath. Abdomen extending some little distance beyond the hind wings. Legs rather slender, not long; hind tibiæ with four minute spurs. Wings rather narrow. Fore wings straight in front; first, second and third inferior veins contiguous at the base; fourth remote from the others. Hind wings convex in front.

A. Alæ anticæ flavo-variæ.
  A. Alæ anticæ dimidio apicali flavo. - auro-coccineus, *Walk.*
  A. Alæ anticæ flavo bimaculatæ. - - flavo-roseus, *Walk.*
  B. Alæ anticæ flavo unifasciatæ. - - Psamas, *Cram.*
  C. Alæ anticis maculis plurimis flavis. - - Hippia, *Stoll.*
B. Alæ anticæ non flavo variæ. - - - bifasciatus, *Cram.*

1. Evius auro-coccineus.

Aureo-flavus; caput coccineo fasciatus et bistrigatus; palpi nigri, coccineo strigati; antennæ piceæ, apice albæ; thoracis latera et abdomen coccinea; pedes albi; coxæ et tibiæ anticæ coccineo vittatæ; femora antica supra fusca; alæ anticæ cinereo-rufæ, dimidio fere apicali aureo-flavo vitta arcuata e maculis quatuor fuscis, costæ plus dimidio basali albo; posticæ rufæ, apices versus flavæ.

Golden yellow, white beneath. Head with a crimson streak on each side, and divided by a crimson band from the prothorax. Proboscis tawny. Palpi black, with a crimson stripe on each outer side. Antennæ piceous, testaceous towards the base, white towards the tips, crimson on the outer side towards the base. Thorax crimson on each side, hind part brownish lilac. Abdomen crimson above. Legs pure white; fore coxæ and fore tibiæ with crimson stripes; fore femora brown above. Fore wings grayish red for more than half the length from the base; from thence to the tips golden yellow, with a discal semicircle of four brown dots. Costa white along more than half the length from the base. Hind wings red, yellow towards the tips. Length of the body 6 lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.

2. Evius flavo-roseus.

Roseus, subtus flavus; antennæ fuscæ; pedes flavi, femoribus tibiisque anticis supra rufis; alæ anticæ macula magna costali subtrigona, 2aque minore exteriore flavis; posticæ pallide luteæ.

Rosy, with a lilac bloom, pale yellow beneath. Proboscis testaceous. Antennæ brown, rose-colour at the base. Legs pale yellow; fore femora and fore tibiæ red above. Fore wings with a large subtriangular yellow spot on the fore border beyond the middle, and a smaller one on the exterior border. Hind wings pale luteous. Length of the body 5 lines; of the wings 13—14 lines.

a. Parà. Presented by J. P. G. Smith, Esq.
b. Honduras. From Mrs Dyson's collection.

3. Evius Hippia.

Fœm. *Fuscus, thorax fascia antica albida, postice rufus; abdomen rufum, apice album; alæ anticæ dimidio basali fusco maculis flavis, apicali fusco guttis flavis, costa rufa; posticæ testaceæ.*

Empusa Hippia, *Hübn. Verz. Schmett.* (*Phalæna Veræ Hipocritæ Sphingiformes*), 170, 1752.
Phalæna Bombyx Hippia, *Stoll. Suppl. Cram. Pap. Exot.* v. 57, pl. 12, f. 8.

Fem. Brown. Thorax with a whitish band in front; hind part red, Abdomen red; tip white. Fore wings brown for nearly half the length from the base, and along the costa, which is red, yellow from thence to the tips; the brown part has a concave border, contains a yellow discal dot, and beyond it a yellow subcostal spot; the yellow part has a few brown dots in an oblique line. Hind wings testaceous.

Surinam.

4. Evius Psamas.

Rufus; abdomen testaceum; alæ anticæ fascia perobliqua ocelloque nigris, apices versus flavæ macula maxima rufa nigro marginata; posticæ nigricantes.

Phalæna Psamas, *Cram. Pap. Exot.* iii. 72, pl. 234, f. G.
Creatonotos Psamas, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hiprocritæ Sphingiformes*), 170, 1746.

Berbice. Surinam.

5. Evius? bifasciatus.

Fœm. *Rufo-ferrugineus; proboscis brevis; antennæ simplices; alæ anticæ oblique nigro lineato-bifasciatæ.*

Phalæna bifasciata, *Cram. Pap. Exot.* iii. 104, pl. 252, f. F.
Automolis bifascia, *Hübn. Verz. Schmett.* 171, 1759.

Surinam.

Genus 20. ARARA.

Fœm. Corpus cylindricum longiusculum. Oculi magni, extantes. Proboscis corporis dimidio brevior. Palpi longiusculi, ascendentes; articulus 2us arcuatus, 1o multo longior; 3us conicus, minimus. Antennæ subpectinatæ. Abdomen alas posticas longe superans. Pedes sat graciles, non longi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ angustæ; posticæ antice convexæ.

Fem. Body cylindrical, rather long. Eyes large and prominent. Proboscis less than half the length of the body. Palpi rather long, ascending; second joint curved, very much longer than the first; third conical, very minute. Antennæ minutely pectinated beneath. Abdomen extending far beyond the hind wings. Legs

rather slender, not long; hind tibiæ with four spurs of moderate length. Wings narrow. Fore wings straight in front; first and second inferior veins nearly contiguous at the base; third much nearer to the second than to the fourth. Hind wings convex in front; discal areolet thickened; three inferior veins, first and second united at the base, third remote.

1. ARARA VITTIPES.

Fœm. *Ochracea; caput albido varium; palpi albidi, articulis 2o 3oque apice nigris; antennæ fulvæ; thorax nigro biguttatus; abdomen basim versus subtus et apud margines posticos albidum; pedes albidi, femoribus tibiisque nigro vittatis; alæ anticæ luteæ, ex parte ochraceæ, fascia subtrigona alteraque exteriore lata obliqua purpurascentibus vittisque nigris albido marginatis; posticæ pallide subluteæ, fere hyalinæ.*

Fem. Ochraceous. Head whitish about the eyes on each side of the vertex. Proboscis tawny. Palpi whitish; tips of the second and third joints black. Antennæ tawny, whitish above towards the tips. Thorax with a black dot on each side in front of the base of each fore wing. Abdomen whitish beneath towards the base; hind borders of the segments whitish. Legs whitish; femora and tibiæ with black stripes. Fore wings luteous, partly ochraceous, with a nearly triangular purplish band, whose greatest breadth is on the fore border when it extends from the base to beyond the middle of the wing; it is connected behind its base, (which is truncated) with another broad and very oblique band which proceeds from it to the middle of the exterior border; the veins in these bands are accompanied by black whitish-bordered stripes, and the bands also contain a few black dots. Hind wings nearly hyaline, with a slight pale luteous tinge which is most prevalent about the borders. Length of the body 5 lines; of the wings 12 lines.

a. Brazil. From Mr. Stevens' collection.

Genus 21. SCAPTIUS.

Mas. Corpus cylindricum, longiusculum. Oculi magni, extantes. Proboscis corporis dimidio brevior. Palpi longiusculi, ascendentes; articulus 2us arcuatus, 1o multo longior; 3us conicus, minimus. Antennæ subserratæ. Abdomen alas posticas longe superans. Sexualia parva, occulta. Pedes validi, non longi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ angustæ, antice subconvexæ.

Male. Body cylindrical, rather long. Eyes large, prominent. Proboscis less than half the length of the body. Palpi rather long, ascending; second joint curved, very much longer than the first; third conical, very minute. Antennæ minutely serrated beneath. Abdomen extending far beyond the hind wings. Sexualia small, concealed. Legs rather stout, not long; hind tibiæ with four rather long spurs. Wings narrow. Fore wings slightly convex in front; first and second inferior veins united at the base; third full thrice further from the fourth than from the second. Hind wings convex in front; three inferior veins; first and second united at the base; third rather remote.

1. SCAPTIUS DITISSIMUS.

Mas. *Flavus; caput antice, pectus et abdomen subtus alba; palpi albidi; antennæ fulvæ; thorax rufo quinquevittatus, lateribus anticis fuscis; abdomen supra rufum; pedes albi, coxis tibiisque anticis supra testaceis, femoribus anticis supra fuscis; alæ anticæ cervinæ, purpureo-fusco variæ, venis rufis, triente apicali oblique flava, macula purpureo-fusca rufo marginata; posticæ fuscæ, subtus basi antice flavæ.*

Male. Yellow. Head in front and beneath, pectus and under side of the abdomen white. Proboscis and antennæ tawny, the latter red and yellow at the base. Palpi whitish. Thorax with five red stripes, pale brown on each side in front of the wings. Abdomen bright red above. Legs white; fore coxæ and fore tibiæ testaceous above; fore femora brown above. Fore wings fawn-colour, varied with purplish brown for nearly two-thirds of the length; veins red; apical third part obliquely yellow, containing a semidetached purplish brown red-bordered spot; veins luteous. Hind wings dark brown, yellow beneath in front towards the base. Length of the body 5 lines; of the wings 12 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

Genus 22. EMPUSA.*

Corpus lineare, cylindricum, longiusculum, sat validum. Proboscis corporis dimidio brevior. Palpi longi, ascendentes, arcuati, subtus dense pilosi; articulus 2us 1us duplo longior; 3us lanceolatus, 1o paullo longior. Antennæ graciles, subtus serratæ. Abdomen

* This genus is accidentally omitted in the synopsis of genera (p. 588), where it should follow *Scaptius*. Its longer palpi, with the third joint lanceolate, distinguish it from that genus.

alas posticas longe superans. Pedes mediocriter longi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat longæ et angustæ; anticæ lanceolatæ.

Empusa, p., *Hübn. Verz. Schmett.* 170.
Phalæna, p., *Cram.*

Body linear, cylindrical, rather long and stout. Proboscis less than half the length of the body. Palpi long, ascending, thickly pilose beneath, curved; second joint about twice the length of the first; third lanceolate, a little longer than the first. Antennæ slender, serrated beneath. Abdomen extending far beyond the hind wings. Legs moderately long; hind tibiæ with four rather long spurs. Wings rather long and narrow. Fore wings lanceolate, almost straight in front; discal fold distinct in the discal areolet; first and second inferior veins almost contiguous at the base; third full six times further from the fourth than from the second. Hind wings slightly convex in front, with three inferior veins.

A. Abdomen non fasciatum.
  A. Alæ anticæ dimidio apicali argenteo. - - vitrea, *Cram.*
  B. Alæ anticæ fusco-testaceæ. - - - Tybris, *Cram.*
B. Abdomen fasciatum. - - - - - Scyton, *Fabr.*

1. Empusa vitrea.

Fulva; caput fasciis duabus nigro-fuscis; palpi nigri; antennæ fulvæ; thorax fasciis nigro-fuscis; abdomen subtus testaceum; pedes albidi, femoribus anticis supra fusco vittatis; alæ anticæ fusco-fulvæ, guttis nigris albido marginatis, basalibus, vittisque nigris albis cyaneisque, triente apicali oblique cyaneo-alba nigro triguttata; posticæ rufo-fulvæ, marginibus venisque albis.

Phalæna vitrea, *Cram. Pap. Exot.* iii. 151, pl. 276, f. c.
Empusa vitrea, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*) 170, 1748.

Surinam.

Tawny. Head with two blackish brown bands. Proboscis testaceous. Palpi black. Antennæ tawny, whitish above. Thorax with blackish brown bands in front, the third interrupted; a blackish brown spot on the disk and two tufts of the same colour behind. Abdomen testaceous beneath. Legs whitish; fore femora striped above with brown. Fore wings brownish tawny, with some black whitish bordered dots near the base, and with black stripes, with which are three white and blue stripes; there are also two white

dots near the interior angle; more than one-third part from the tips is obliquely white with a blue tinge, and contains three black dots in a line parallel to the exterior border; the veins and cilia in this part and the whole of the costa are white; under side blue-white, with a few black marks, reddish tawny towards the base. Hind wings reddish tawny, with white borders and veins.

a. Rio Janeiro. From Mr. Stevens' collection.

2. Empusa? Tybris.

Pallide testacea; caput album; thorax canus, luteo maculatus, antice albus; abdomen luteum; alæ anticæ basi luteo guttatæ, triente basali albo-fusco plagiata, fasciis duabus obliquis e guttis fuscis; posticæ costa alba, margine interno luteo.

Phalæna Tybris, *Cram. Pap. Exot.* i. 145, pl. 92, f. D.
Empusa Tybris, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*) 170, 1751.

Surinam.

3. Empusa? Scyton.

Albida; abdomen atrum glauco fasciatum, caput luteum; thorax cinereo oblique bifasciatus; apice luteum; alæ anticæ macula costali apicibus, fasciisque duabus obliquis cinereis, fascia 1a abbreviata; posticæ cinereæ, antice albidæ semihyalinæ.

Zygæna Scyton, *Fabr. Sp. Ins.* ii. 164, 40; *Mant. Ins.* ii. 106, 49; *Ent. Syst.* iii. 1, 401, 52.
Sphinx Scyton, *Cram. Pap. Exot.* ii. 5. pl. 99, f. B.
Sphinx Zygæna Scyton, *Gmel. ed. Syst. Nat.* i. 5, 2398, 144.
Empusa Scyton, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*) 170, 1762.

Surinam.

Genus 23. IDALUS.

Corpus breviusculum. Oculi magni. Proboscis corporis dimidio brevior. Palpi mediocriter longi; articulus 2us lo multo longior; 3us minimus. Pedes sat graciles, non longi; tibiæ posticæ calcaribus quatuor parvis. *Mas.*—Antennæ breviter pectinatæ. Abdomen alas posticas paullo superans. Sexualia parva, occulta. Alæ posticæ brevissimæ, antice dilatatæ, apice truncatæ. *Fœm.*—Antennæ simplices. Abdomen alas posticas sat longe superans. Alæ posticæ breviusculæ.

Phalæna, p., *Cram.*
Empusa, p., *Hübn.*

Body rather short. Eyes large. Proboscis less than half the length of the body. Palpi moderately long; second joint much longer than the first; third extremely minute. Legs rather slender, not long; hind tibiæ with four rather small spurs. Fore wings long, slightly pointed; discal fold not distinct; first, second and third inferior veins near together at the base; third about thrice further from the fourth than from the first. Hind wings slightly convex in front. *Male.*—Antennæ pectinated; branches short. Abdomen extending a little beyond the hind wings. Sexual parts small, concealed. Hind wings very short, dilated in front, truncated at the tips. *Female.*—Antennæ simple. Abdomen extending some distance beyond the hind wings. Hind wings rather short.

1. IDALUS ADMIRABILIS.

Albus; caput supra luteum; palpi basi rufi; antennæ fuscæ supra albidæ; thorax fascia lata lutea guttisque duabus anticis fuscis; pectoris latera rufa; abdomen supra læte rufum; coxæ anticæ subtus rufæ; alæ anticæ luteæ. Mas.—*Alæ anticæ basim versus albæ luteo fasciatæ, fasciis duabus nigricantibus, la basali, strigaque postica basali rufescente.* Fœm. —*Alæ anticæ fasciis duabus fuscis albo marginatis, macula discali fusca, liturisque duabus rufis; posticæ rufæ, albo marginatæ aut ciliatæ.*

Phalæna admirabilis, *Cram. Pap. Exot.* ii. 11, pl. 103, f. G.
Empusa admirabilis, *Hübn. Verz. Schmett.* 170, 1747.
Surinam.

White. Head luteous above. Proboscis tawny. Palpi red towards the base, black above towards the tips. Antennæ brown, whitish above. Thorax with a broad luteous band, in front of which are two brown dots. Pectus red along each side. Abdomen bright red above. Fore coxæ red beneath. Fore wings luteous. *Male.*—Fore wings towards the base white, including a luteous band, which is abbreviated hindward; a blackish band at the base and another oblique one at the end of the white part; a reddish streak at the base of the interior border; veins white in the white and blackish parts. *Female.*—Fore wings with two brown bands, bordered with white; a brown spot in the disk at three-fourths of the length, and a red mark at the base, and another at the end of the inner border. Hind wings red, white along the fore border, and with a white fringe. Length of the body 4½—5 lines; of the wings 14—16 lines.

a, b. Brazil. From Mr. Milne's collection.

Genus 24. HYPERCOMPA.

Palpi brevissimi, ascendentes, pilosi, squamis appressis; articulus 1us apice tumidus, 2i longitudine; 3us brevis, ovatus. Proboscis capite multo longior. Antennæ in utroque sexu simplices, ciliatæ. Alæ dense squamosæ. Pedes robusti, squamosi; femora squamis appressis; tibiæ anticæ femoribus multo breviores.

Hypercompa, *Steph. Ill. Brit. Ent. Haust.* ii. 67.
Phalæna-Noctua, p., *Linn.; Berk.; Don.; Stew.; Turt.*
Arctia, p., *Schr.*
Noctua, p., *Esp.; Haw.*
Callimorpha, p., *Latr.; Leach.; Sam.; God.; Meig.; Herr.-Schæff.*
Hypercompæ, p., *Hübn.*
Euprepia, p., *Ochs.*
Euplagia et Heraclia, p., *Hübn. Verz. Schmett.* 180.
Heraclia, *Westw.*

Europe.

A. Alæ anticæ fasciis obliquis sulphureis. - - Hera, *Linn.*
B. Alæ anticæ maculis albis. - - - - Dominula, *Linn.*

Group 1.

Alæ anticæ non duplo longiores quam latiores, apicibus distincte angulosis, margine externo subobliquo.

Fore wings not twice longer than broad, rounded at the tips; outer border slightly oblique.

1. HYPERCOMPA HERA.

Abdomen rubrum, nigro signatum; alæ anticæ virescente nigræ fasciis obliquis sulphureis; posticæ rubicundæ maculis tribus nigris; tibiæ posticæ femoribus longiores.

Noctua Hera, *Linn. Syst. Nat.* i. 2, 834, 91. *Esper, Schmett.* iv. 41, pl. 83. *Noct.* 4, f. 5—7; pl. 34, 189. *Noct.* 110, f. 6—8.
Noctua tripunctaria, *Poda, Mus. Græc.* 89, 20.
Arctia Hera, *Schr. Faun. Boic.* ii. 2, 152, 3.
——— ———, *Mouff. Ins.* 91, 7, 4. *Geoffr. Hist. Ins.* ii. 145, 74. *Röes. Ins. Bel.* iv. 194, pl. 28, f. 3. *Kleem, Beitr.* 345, pl. 41, f. 1—5. *Schæff. Elem.* pl. 10, f. 1. *Icon.* pl. 29, f. 1, 2. *Ernst, Pap. d'Eur.* iv. 123, pl. 144, f. 190, a—i.

Phalæna Hera, *Gmel. ed. Syst. Nat.* i. 5, 2442, 91. *Schweiz. Ins.* 36, 693.

Phalæna Plantaginis, *Scop. Ent. Carn.* 263.

Bombyx Hera, *Fabr. Ent. Syst.* iii. 1, 474, 209. *Oliv. Enc. Méth.* v. 95, 242. *Hübn. Bomb.* 130, 1, pl. 27, f. 116. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, H, f. 2. *Wien. Verz.* 52. Fam. E. 3. *Illig. N. Auss. dess.* i. 78, 3. *Schæff. Icon.* 40 (*Nomencl. Panz.*), pl. 29, f. 1, 2. *Schr. Faun. Boic.* ii. 1, 258, 1432. *Panz. Faun. Germ.* 31, 25. *Borkh. Eur. Schmett.* ii. 205, 62. *Rhein. Mag.* i. 337, 171. *Rossi, Faun. Etr.* ii. 776, 1099. *Ed. Illig.* 281, 1099. *Lang. Verz.* ii. 89, 686, 687. *Brahm, Ins.* 63, 25, *Schwarz. Raup.* 9, 107, 573, 702. *Esp. Schmett.* iv. pl. 83, f. 5—7; pl. 189, f. 6—8. *Treits. Hulfsb. Schmett.* 221, 97.

Eyprepia Hera, *Ochs. Schmett.* iii. 319, 10; iv. 60, 208, 10.

Euplagia Hera, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Callimorphæ Variegatæ*) 180, 1858.

Callimorpha Hera, *Latr. Gen. Crust. et Ins. God. Pap. de France*, iv. 368, 116, pl. 38, f. 1. *Herr.-Schæff. Suppl.* 151, 44, 4. *Speyer, Ent. Zeit. Stett.* xiii. 285, 5. *Meig. Handb.* 140, 92; *Syst. Beschr. Eur. Schmett.* iii. 40, 3, pl. 86, f. 2.

Bombyx (Eyprepia) Hera, *Freyer, Neuere Beitr. Schmett.* iii. 128, pl. 284.

a. Europe. From Dr. Leach's collection.

b—*e*. Europe. From M. Becker's collection.

f, *g*. Athens. Presented by — Merlin, Esq.

h. Europe.

Group. 2.

Alæ anticæ duplo longiores quam latiores, apice rotundatæ, margine externo obliquo.

Fore wings twice longer than broad, rounded at the tips; outer border oblique.

2. Hypercompa Dominula.

Abdomen rubrum, linea dorsali lateribusque nigris; alæ anticæ viridi atræ, maculis albo-flavescentibus; posticæ rubræ, nigro maculatæ; tibiæ posticæ femoribus longiores.

Noctua Dominula, *Linn. Syst. Nat.* ii. 834, 90. *Gmel. ed. Syst. Nat.* i. 5, 2442, 90. *Berk. Syn.* i. 139. *Don. Nat. Hist. Brit. Ins.* iv. pl. 141. *Stew. El. Nat. Hist.* ii. 158. *Turt. Syst. Nat.* 225. *Esp. Schmett.* iv. 38, pl. 83. *Noct.* 4, f. 1—4. *Scop. Ent. Carn.* 506. *Wilk. Pap.* 19, pl. 3, 3. *Merian, Ins. Eur.* ii. pl. 38.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 22, f. 31, a—d. *Harr. Aus.* pl. 40, f. a—d. *Geoffr. Hist. Ins.* ii. 107, 7. *Röes. Ins. Bel.* iii. 267, pl. 47, f. . *Ernst, Pap. d'Eur.* iv. 142, pl. 152, f. 197, a—h. *Schæff. Icon.* pl. 77, f. 3, 4.

Bombyx Dominula, *Fabr. Sp. Ins.* ii. 200, 130; *Mant. Ins.* ii. 130, 183; *Ent. Syst.* iii. 1, 475, 210. *Oliv. Enc. Méth.* v. 96, 243. *Wien. Verz.* 53. Fam. E. 8. *Illig. N. Ausg. dess.* i. 84, 8. *Scop. Ent. Carn.* 204, 506. *Schæff. Icon. Nomencl. Panz.* 92, pl. 77, f. 3, 4. *Wilkes, Nat. Hist.* pl. 38. *Borkh. Eur. Schmett.* iii. 202, 61. *Rhein. Mag.* i. 339, 174. *Fuessl. Schweiz. Ins.* 36, 692. *N. Mag.* ii. 60, 90. *Esp. Schmett.* iv. pl. 83, f. 1—4; pl. 184, f. 4. *Hufnagel, Pl. in Berl. Mag.* iii. 2, 204, 2. *Vieweg, Pl. Verz.* i. 62, 66. *Lang. Verz.* ii. 91, 703, 704. *Treits. Hulfsb. Schmett.* 221, 96.

Phalæna dominula, *Brahm, Ins. Kal.* 64, 26. *Schwarz. Raup.* 107, 406, 573, 702, 762.

Bombyx Domina, *Hübn. Bomb.* (mas) 118, pl. 27, f. 117 (fœm.), 131, 2, pl. 52, f. 223. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, H, f. 1, a, b.

Var. Bombyx Persona, *Hübn. Beitr.* ii. 4; iv. 97, 128, pl. 5.

Var. Bombyx alpina, *Acerbi, Voy. au Cape Nord.* iii. 111, 5, pl. 114, 4. *Alæ, anticæ nigræ, flavo maculatæ; posticæ coccineæ, basi fasciisque macularibus, concatenatis atris.*

Noctua donna, *Esp. Schmett.* iv. 3, pl. 180, *Noct.* 101, f. 1; 19, pl. 184. *Noct.* 105, f. 4.

Arctia dominula, *Schr. Faun. Boic.* ii. 1, 261, 1437.

Callimorpha Dominula, *Latr. Gen. Crust. et Ins.* iv. 221. *God. Lep. de France*, iv. 372, 117, pl. 38, f. 2, 3. *Meig. Handb.* 140, 91; *Syst. Beschr. Eur. Schmett.* iii. 41, 4, pl. 86, f. 4. *Herr.-Schæff. Suppl.* 151, 42, 2. *Speyer, Ent. Zeit. Stett.* xiii. 285, 6.

Eyprepia dominula, *Ochs. Schmett. Eur.* iii. 316, 9; iv. 60, 207, 10.

Bombyx (Eyprepia) Dominula, *Freyer, Neuere Beitr. Schmett.* iv. 139, pl. 369, f. 1.

Var. Bombyx (Eyprepia) persona, *Freyer, Neuere Beitr. Schmett.* iii. 110, pl. 272, f. 2.

Heraclia Dominula, *Hübn. Verz. Schmett.* (*Phalæna Veræ Callimorphæ Variegatæ*) 180, 1856. *Westw. & Humph. Moths.* i. 96, pl. 19, f. 16, 17.

Euprepia Dominula, *Freyer, Ent. Zeit. Stett.* ii. 90. *Costa, Ann. Soc. Ent. Fr.* xi. 239, pl. 9, f. 7, 8.

Hypercompa Dominula, *Steph. Ill. Brit. Ent. Haust.* ii. 67. Var. *Bree, Mag. Nat. Hist.* vi. 541, f. 72.

Var. *Abdomen nigro-viride.*

Noctua Donna, *Esp. Schmett.* iv. pl. 180, f. 1.
Callimorpha Donna, *Meig. Syst. Beschr. Eur. Schmett.* iii. 41, 5, pl. 86, f. 5.
Var. a. Rossica, *Kol. Mel. Ent.* 95. *Zeller, Ent. Zeit. Stett.* ix. 372. *Alæ posticæ et abdomen lutea.*

Russia. Transcaucasia.

a. England. Presented by H. Doubleday, Esq.
b—r. England. From Mr. Stephens' collection.
s—x. England. From Mr. Foxcroft's collection.
y. England.
z—cc. Europe. From M. Becker's collection.

North America.

A. Alæ posticæ luteæ.
A. Alæ anticæ fuscæ, vittis macularibus albis. Clymene, *Esper.*
B. Alæ anticæ lutescentes, fusco submarginatæ. Comma, *Walk.*
B. Alæ posticæ albæ.
A. Alæ anticæ maculis albis. - - - Lecontei, *Boisd.*
B. Alæ anticæ vitta maculisque duabus albis. contigua, *Walk.*
C. Alæ anticæ vitta maculaque albis. - - - confinis, *Walk.*

The North American species, with the exception of *H. Comma*, much resemble *H. Hera* in structure, but differ much from it in the colour and markings of their wings. *H. Comma* forms a distinct group in the genus.

3. Hypercompa Clymene.

Lutea; antennæ nigræ; palpi apice nigris; prothorax fusco biguttatus; thoracis discus albus, fusco univittatus; abdomen sæpissime maculis dorsalibus fuscis; alæ anticæ fuscæ vitta basali angulata, maculis tribus anticis unaque postica subapicali divisa albis; posticæ sæpissime maculis duabus posticis fuscis.

Noctua Clymene, *Esper, Schmett.* iv. 22, 10, pl. 182. *Noct.* 103, f. 1.
Bombyx Colona, *Hübn. Bomb.* 135, 8, pl. 31, f. 135.
Eyprepia Clymene, *Ochs. Schmett. Eur.* iv. *Suppl.* 208, 11.
Callimorpha Clymene, *Meig. Syst. Beschr. Eur. Schmett.* iii. 40, pl. 86, f. 2.
Phalæna Clymene, *Brown, Ill. of Zool.* 38. *Hübn. Bomb.* 39.
Haploa Clymene, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hypercompæ Coloreæ*), 182, 1876.

Var. a. Hind wings with three submarginal spots and a marginal streak.
Var. β. Hind wings with two submarginal spots.
Var. γ. Hind wings with one submarginal spot.
Var. δ. Hind wings unspotted.

a. United States. Presented by E. Doubleday, Esq.
b—d. ——— ?

4. HYPERCOMPA LECONTEI.

Alba; caput, prothorax et pedes lutea; antennæ nigræ; palpi apice nigri; thorax et abdomen fusco univittata; alæ anticæ fuscæ vitta antica fasciaque subapicali e maculis albis; posticæ nonnunquam gutta postica fusca.

Callimorpha Lecontei, *Boisd.*

Var. a. Fore wings with four white spots; second nearly round.
Var. β. Second spot forked; fourth interrupted.
Var. γ like *var. β.* Third spot nearly divided.
Var. δ like *var. β.* Second and third spots divided.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.
e, f. ——— ?

5. HYPERCOMPA CONFINIS.

Alba; caput, prothorax, abdomen basi et coxæ anticæ ex parte lutea; thorax et abdomen fusco vittata; alæ anticæ marginibus plerumque fasciaque obliqua fuscis.

White. Head, prothorax, fore coxæ and abdomen at the base luteous. Proboscis tawny. Palpi with black tips. Antennæ black. Thorax and abdomen with a brown stripe. Fore wings brown, with a discal slightly angular white stripe, and an elongate-triangular oblique subapical white band. Length of the body 6 lines; of the wings 18 lines.

a—d. United States. From Mr. Dyson's collection.

6. HYPERCOMPA CONTIGUA.

Alba; caput et prothorax lutea; palpi nigri, basi lutei; antennæ nigræ; thorax et abdomen fusco univittata; alæ anticæ marginibus plerumque fascia postmedia vittaque subapicali fuscis; posticæ macula submarginali fusca.

White. Head, prothorax and fore coxæ luteous. Proboscis tawny. Palpi black, luteous at the base. Antennæ black. Thorax and abdomen with a brown stripe. Fore wings brown, with a white

discal stripe, which widens from the base to a little beyond the middle, and with two large subapical white spots. Hind wings with a small brown spot near the hind border. Length of the body 6 lines; of the wings 18 lines.

a. United States. Presented by E. Doubleday, Esq.

7. Hypercompa Comma.

Luteo-testacea; palpi apice nigri; antennæ nigræ; thorax et abdomen fusco univittata; alæ anticæ marginibus plerumque maculaque arcuata postica fuscis; posticæ nonnunquam macula submarginali fusca.

Luteous, partly testaceous. Proboscis tawny. Palpi with black tips. Antennæ black. Thorax and abdomen with a brown stripe. Fore wings above with a brown border, which is interrupted at the tips and by the hind angle, near which there is a curved brown streak. Hind wings occasionally with a small round brown spot near the hind border. Length of the body 7 lines; of the wings 20 lines.

a. United States. Presented by E. Doubleday, Esq.
b. Virginia. From Mr. Milne's collection.

Africa.

The only South African species of this genus forms a peculiar group; it somewhat resembles *H. Hera* in form, but the colours and markings of the wings are quite different; the fore wings are broader, and their interior and exterior borders are more rounded.

8. Hypercompa bellatrix.

Lutea; alæ maculis fasciisque flexuosis nigro-cyaneis; corpus nigro-cyaneo maculatum.

Callimorpha bellatrix, *Dalm. Anal. Entom.* 50, 26.
Euchelia pardalina, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 117.

a. South Africa. Presented by Dr. A. Smith.
b. Port Natal. From M. Gueinzius' collection.
c, *d*. ——? From Mr. Milne's collection.

Asia.

A. Alæ anticæ viridescentes.
A. Alæ posticæ luteæ.
a. Abdomen coccineum. - - - principalis, *Kollar.*
b. Abdomen luteum.

a. Alarum anticarum maculæ subapicales rotundatæ. histrio, *Walk.*

b. Alarum anticarum maculæ subapicales elongatæ. plagiata, *Walk.*

B. Alæ posticæ albidæ. - - - - equitalis, *Kollar.*

B. Alæ anticæ nigro-fuscæ aut nigræ.

A. Alæ posticæ luteæ.

a. Alæ posticæ maculatæ.

a. Alæ anticæ albido vittatæ. - - imperialis, *Kollar.*

b. Alæ anticæ albo maculatæ. - - longipennis, *Walk.*

b. Alæ posticæ immaculatæ, nigro marginatæ. Lemnia, *Boisd.*

B. Alæ posticæ fuliginosæ, flavido contaminatæ. Leopardina, *Kollar.*

C. Alæ anticæ subcinereæ. - - - - Marchalii, *Guér.*

D. Alæ anticæ flavæ. - - - - - Lerne, *Boisd.*

E. Alæ anticæ albidæ.

A. Abdomen rufum. - - - - Pasimuntia, *Cram.*

B. Abdomen luteum, nigro maculatum. multigullata, *Walk.*

The Asiatic *Hypercompæ* in the British Museum form four groups. The first, of *H. longipennis*, is distinguished by the slender body and the narrow and elongated fore wings. In *H. principalis* and *H. equitalis*, the body is rather slender, but the wings are broader and less elongated. In *H. histrio* and *H. plagiata*, the body is much thicker, and in the fourth group with *H. imperialis* it is very thick.

9. HYPERCOMPA PRINCIPALIS.

Cinnabarina; thorax viridi-æneus, flavo vittatus; abdomen viridi maculatum; alæ anticæ obscure æneo-virides copiosissime flavo maculatæ; posticæ flavæ, nigro radiatæ.

Euprepia principalis, *Kollar, Kaschmir von Von Hugel*, 465, 1, pl. 20, f. 2.

Himalaya Mountains.

Body red. Head with two black dots between the eyes, two behind, and a large black spot in front; also with two black dots beneath the eyes, which are partly bordered with yellow hairs. Palpi red, with black spots and tips. Proboscis tawny. Antennæ black. Legs black, striped with yellow; coxæ red, varied with yellow, spotted with black.

a. Himalaya Mountains. Presented by the Entomological Club.
b. Himalaya Mountains. From Mr. Leadbeater's collection.

10. HYPERCOMPA EQUITALIS.

Fusco-olivacea; thorax æneus, albo vittatus; abdomen basi apiceque rubrum; alæ anticæ fusco-olivaceæ, albo maculatæ; posticæ albæ, fusco venosæ et maculatæ.

Euprepia equitalis, *Kollar, Kaschmir von Von Hugel*, 465, 2, pl. 20, f. 3.

Himalaya Mountains.

Head red, pale yellow about the eyes, with two black dots between the antennæ, two behind and two beneath, and a large black spot in front. Palpi red, with black spots and tips. Proboscis tawny. Antennæ black. Thorax æneous green, with two pale yellow stripes, in front with one stripe which is partly red, partly pale yellow. Pectus red, with black spots. Abdomen blackish green, red on each side and at the tip; under side pale yellow, middle stripe and hind borders of the segments brown. Fore wings æneous green, with many oblong subquadrate whitish spots, which form a forked band at two-thirds of the length. Hind wings whitish, with more or less æneous green spots along the hind border, and with an æneous green stripe near the inner border; veins brown. Legs brown, streaked with pale yellow. Length of the body 11 lines; of the wings 34 lines.

a—c. Nepaul. Presented by Major-Gen. Hardwicke.
d. Himalaya Mountains. Presented by the Entomological Club.

11. HYPERCOMPA HISTRIO.

Fœm. *Læte flava; corpus maculis nigro-viridibus; antennæ nigræ; abdomen fasciis dorsalibus nigro-viridibus; pedes nigro-cyanei, flavo strigati; alæ anticæ viridi-nigræ, maculis sexdecim albis unaque flava subtrigona; posticæ fasciis tribus irregularibus macularibus atris.*

Fem. Bright yellow. Head with a large blackish green spot in front. Proboscis testaceous. Antennæ black. Prothorax with a large blackish green spot on each side. Thorax blackish green along each side, and with a large dorsal conical blackish green spot. Abdomen with a blackish green dorsal band on each segment; under side with three rows of blackish green spots. Legs blackish blue, streaked with yellow. Fore wings greenish black; each with sixteen white spots of various size and form, and with one nearly triangular yellow spot towards the costa, and a little before the middle. Hind wings bright yellow, with three irregular macular

deep black bands, the innermost one abbreviated in front, the outermost containing in front some small yellow spots. Length of the body 13 lines; of the wings 38 lines.

a. Shanghai, North China. From Mr. Cuming's collection.
b. North China. From Mr. Fortune's collection.

12. HYPERCOMPA PLAGIATA.

Nigro-viridis; caput, thorax et abdomen luteo fasciata; thorax luteo sexmaculatus; femora basi flavo striata; alæ anticæ maculis plurimis strigisque subapicalibus flavo-albis; posticæ læte flavæ, fasciis duabus macularibus, macula discali fasciaque marginali nigro-viridibus.

Blackish green. Head with a luteous band behind. Proboscis and antennæ black. Prothorax with a posterior luteous band. Thorax with four dorsal luteous spots, with a luteous spot on each shoulder, and with a luteous hind border. Abdominal segments with luteous bands. Femora streaked with yellow towards the base. Fore wings with many yellowish white spots of various size (one or two of them mostly bright yellow), and with a subapical band of broad yellowish white streaks. Hind wings bright yellow, with two macular blackish green bands, and with a discal spot, and a more or less interrupted marginal band of the same colour. Length of the body 11—13 lines; of the wings 32—36 lines.

a, *b*. Silliet. Presented by E. Doubleday, Esq.

13. HYPERCOMPA IMPERIALIS.

Nigra; caput macula quadrata, thorax vittis marginalibus pallide flavis nigro oculatis; abdomen rubro-nigroque annulatum; alæ anticæ vittis duabus pallide flavis basi in angulum acutum confluentibus, margine externo lineolisque duabus ejusdem coloris; posticæ flavicantes nigro maculatæ.

Euprepia imperialis, *Kollar, Kaschmir, von Von Hugel*, 466, pl. 21, f. 1.

Himalaya Mountains.

14. HYPERCOMPA LONGIPENNIS.

Alæ anticæ plus duplo longiores quam latiores, apice rotundatæ, margine externo perobliquo.

Fore wings more than twice longer than broad, rounded at the tips; outer border very oblique.

Atra; caput et thorax luteo varia; abdomen luteum, e maculis nigris trivittatum; alæ anticæ e maculis quinque albis bifasciatæ, basi albo guttatæ; posticæ luteæ maculis apicibusque nigris, his albo uninotatis.

Black. Head with two luteous dots on each side. Thorax in front with two luteous ringlets, which emit two short oblique luteous stripes hindward. Pectus luteous, with black spots. Abdomen with three rows of black spots, extending as far as the hind wings. Fore wings with some white dots at the base, and with two bands, the first composed of two large white spots, the second of three smaller white spots; a white dot on the hind border, most apparent beneath, between the two dots and opposite the tips of the hind wings. Hind wings luteous, black at the base, and with two stripes of black spots; tips black, each with a white spot. Legs with testaceous stripes. Length of the body 8 lines; of the wings 28 lines.

a. Sillet. From Mr. Argent's collection.

15. HYPERCOMPA LEMNIA.

Abdomen nigrum, annulis aurantiacis; alæ anticæ nigræ maculæ media strigaque subpostica albis; posticæ aurantiacæ, margine lato nigro.

Callimorpha Lemnia, *Boisd. Voy. de l'Astrolabe*, Pl. 1, *Lep.* 20 2, pl. 6, f. 7.

Amboina.

16. HYPERCOMPA LEOPARDINA.

Flavida; caput nigro bimaculatum et trivittatum; abdomen rubrum, nigro maculatum; alæ anticæ nigræ, flavido venosæ et maculatæ; posticæ fuliginosæ, flavido contaminatæ.

Euprepia Leopardina, *Kollar, Kaschmir, von Von Hugel*, 467, 4, pl. 21, f. 2.

Himalaya Mountains.

17. HYPERCOMPA MARCHALII.

Alæ anticæ subcinereæ, fasciis undato fuscis punctoque medio nigro; posticæ flavæ, apice macula minima fusca; vertex, thorax et abdomen flava, nigro punctata; alæ anticæ subtus pallido fuscæ, punctis duabus nigris; posticæ flavæ, puncto medio nigro; abdominis latera nigro punctata.

Callimorpha? Marchalii, *Guér.-Voy. Delessert, Hist. Nat.* 91, pl. 26, f. 2.

Neilgherry Mountains.

18. HYPERCOMPA PASIMUNTIA.

Cervino-albo; thorax luteo bivittatus; abdomen rufum; alæ anticæ macula basali fasciis duabus obliquis postice connexis, (1a undulata, 2a extus excavata,) maculisque exterioribus fuscis posticæ rufæ.

Phalæna Pasimuntia, *Cram. Pap. Exot.* iv. 149, pl. 367, f. H.
Haploa Pasimuntia, *Hübn. Verz. Schmett.* 182, 1877.

Amboina.

19. HYPERCOMPA? LERNE.

Alæ omnes flavæ, margine nigro, striga postica albida; anticæ littura costali nigra.

Chilimorpha Lerne, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 207, 3, pl. 5, f. 2.

New Guinea.

20. HYPERCOMPA MULTIQUTTATA.

Mas. Albida; palpi supra nigri; antennæ nigræ; thorax nigro sex maculatus; abdomen supra luteum, e maculis nigris trivittatum; alæ anticæ e guttis nigris septem subfasciatæ; posticæ luteæ fasciis variis gutturibusque nigris.

Male. Whitish. Palpi black above. Antennæ black. Thorax with six black spots. Abdomen luteous above, with three rows of black spots above, and with two beneath. Fore wings with seven imperfect very oblique bands of black dots. Hind wings pale luteous; posterior half with one, two or three oblique bands of black dots. Length of the body 6—7 lines; of the wings 16—20 lines.

a—c. Nepaul. Presented by Major-Gen. Hardwicke.

Australia.

A. Alæ nigræ, albo variæ. - - - Australasiæ, *Donov.*
B. Alæ fulvæ, nigro marginatæ. - - - concolor, *Boisd.*

21. HYPERCOMPA AUSTRALASIÆ.

Corpus aurantiacum; alæ concolores, nigræ, albo variegatæ, macula magna alba; anticæ maculis aurantiacis.

Bombyx Australasiæ, *Donov. Epet. Ins. New Holl.* pl.

Callimorpha Australasiæ, *Boisd. Voy. de l'Astrolabe*. Pt. 1. *Lep.* 206, 1.

New Holland.

22. HYPERCOMPA CONCOLOR.

Alæ quatuor concolores aurantiaco-fulvæ margine latissima nigro micante.

Callimorpha concolor, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 208, 4.

New Holland.

Genus 25. AREAS.

Mas. et fœm. Corpus crassum, cylindricum. Proboscis capitis latitudine longior. Palpi mediocriter longi, porrecti; articulus 2us 1o brevior; 3us parvus, 2i dimidio paullo brevior. Antennæ simplices. Thorax pilis adpressis. Abdomen alas posticas non superans. Tibiæ posticæ calcaribus quatuor aut longis. Alæ longæ, mediocriter latæ.

Male and fem. Body thick, cylindrical. Proboscis longer than the breadth of the head. Palpi moderately long, porrect; first joint longer than the second; third small, conical, nearly half the length of the second. Thorax with short and smooth-lying hairs. Abdomen extending as far as the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings long, moderately broad; second inferior vein close to the first at the base; third full eight times nearer to the second than to the fourth.

1. AREAS ORIENTALIS.

Mas. et fœm. *Alba; palpi rufi ex parte nigri; antennæ nigræ; thorax nigro-viridi univittatus et quadrimaculatus; abdomen rufum maculis dorsalibus nigro-viridibus, subtus luteum maculis lateralibus nigro-viridibus; alæ anticæ vittis duabus albo guttatis fuscis, 1a angulosa et furcata; 2a postica; posticæ testaceo-flavæ, maculis tribus fuscis.*

Male and fem. White. Head red behind, and about the base of the antennæ. Proboscis tawny. Palpi red, partly black. Antennæ black. Prothorax with two blackish green spots, partly red behind and between the spots. Thorax with a blackish green stripe, and on each side with a blackish green dot. Abdomen bright red, with a row of dorsal blackish green spots; under side luteous, with blackish green spots along each side. Legs black; femora streaked with yellow or red. Fore wings with a brown angular forked brown

stripe, which extends from the costa before one-third of the length, shortly rejects a branch to the hind border near the base, joins the hind border beyond the middle, and then, forming an obtuse angle, extends forwards to the disk, and is thence prolonged in two forks to the costa; it contains a few white spots, as does also another brown stripe which proceeds along the hind border; under side testaceous-yellow, tinged with red towards the base; the stripes as above. Hind wings testaceous-yellow, with three brown spots; one in front, and two behind. Length of the body 10—13 lines; of the wings 28—42 lines.

Var. Fem. Hind wings with a subapical brown spot.

a. North India. From M. Deyrolle's collection.
b, c. North India. Presented by E. Doubleday, Esq.

Genus 26. THALAINA.

Mas. Corpus gracile. Caput et thorax pilosa. Proboscis mediocriter longa. Palpi brevissimi, porrecti; articulus 2us 1o multo longior; 3us conicus, minimus. Antennæ sat validæ, corporis dimidio longiores, subtus obtuse serratæ. Pedes graciles; tibiæ anticæ subtus dilatatæ; posticæ calcaribus quatuor longiusculis. Alæ latissimæ; anticæ subtrigonæ, apice vix hamatæ; posticæ abdomen paullo superans.

Thalaina, *MSS.*

Male. Body slender. Head and thorax hairy. Proboscis of moderate length. Palpi very short, porrect; second joint much longer than the first; third conical, very small. Antennæ rather stout, more than half the length of the body, obtusely serrated beneath. Wings very broad. Fore wings subtriangular, hardly hooked at the tips; fore border almost straight; outer border slightly oblique; three inferior veins, the third about twice further from the second than the second is from the first. Hind wings extending a little beyond the abdomen. Legs slender; fore tibiæ dilated beneath; hind tibiæ with four rather long spurs.

This genus recedes very far from the typical forms of *Arctiidæ*, and approaches some of the *Noctuites*, and also *Platypteryx*, to which the two following genera are still nearer allied.

A. Alæ anticæ rufo strigatæ.
A. Alæ anticæ fascia una aut nulla rufa. - Klenæa, *MSS.*
B. Alæ anticæ fasciis duabus vitta connexis rufis. clara, *Walk.*
B. Alæ anticæ fusco strigatæ. - - - inscripta, *Walk.*

1. Thalaina Klenæa.

Argenteo-alba; caput nigrum, vertice rufa, facie alba; palpi et antennæ nigra; thorax rufo bimaculatus; alæ anticæ vittis duabus fasciaque una rufis nigro marginatis, posticæ macula postica nigra, hac subtus majore partimque rufa.

Thalaina Klenæa, *MSS.*

White. Head black; vertex red; face mostly white. Palpi and antennæ black. Proboscis tawny. Thorax with a slight testaceous tinge in front; a red spot on each side. Wings bright silvery-white. Fore wings with a red black-bordered stripe along one-third of the fore border, and with another along two-thirds of the hind border, the two connected at the tips by an oblique band of the same colour; fringe red along the tips. Hind wings above with a black spot near the hind border, not half so large as a corresponding spot below, which is partly red. Length of the body 6—8 lines; of the wings 19—22 lines.

a. New Holland. Presented by the late Earl of Derby.
b. Van Dieman's Land. Presented by E. Doubleday, Esq.
c. New Holland. From M. Becker's collection.

2. Thalaina clara.

Argenteo-alba; vertex rufa; palpi et antennæ fusca, thorax rufo varius; alæ anticæ marginibus fasciis duabus obliquis vittaque obliqua rufis nigro marginatis; posticæ macula subapicali fusca subtus ex parte rufa

Thalaina Klenæa, *Var.?*

White. Vertex red. Proboscis tawny. Palpi and antennæ brown. Front of the thorax with red hairs above, and with brown hairs on each side; a tuft of red hairs at the base of each fore wing. Wings silvery white. Fore wings with the outer border, the hind border, two oblique bands and an intermediate oblique stripe black-bordered red, as is also the costa as far as the first band; the stripe extends from before the middle of the first band to the hind end of the second. Hind wings with a subapical brown spot, which on the under side is larger, and is partly covered by a red spot. Length of the body 6 lines; of the wings 16 lines.

a. Australia. From Mr. Cuming's collection.

In the single oblique band of the fore wings which distinguishes the male of *T. Klenœa*, there is occasionally a slight dilatation which corresponds with the stripe of *T. clara*, but the outer band is wholly wanting in the former.

3. Thalaina inscripta.

Argenteo-alba ; vertex pallide fusca ; antennæ fulvæ ; alæ anticæ margine postico fasciis duabus obliquis vittaque intermedia obliqua maculisque subapicalibus pallide fuscis ; posticæ macula fusca subapicali.

Silvery white. Vertex pale brown. Proboscis and antennæ tawny. Fore wings with the hind border, two oblique bands and an intermediate oblique stripe, and a row of spots along the outer border, pale brown ; the stripe along the hind border is forked towards the base, and the outer band is angular. Hind wings with a brown subapical spot, which is largest on the under side. Length of the body 5—6 lines; of the wings 14—16 lines.

a. Van Dieman's Land. Presented by J. G. Children, Esq.
b—d. Van Dieman's Land. From Mr. A. J. Smith's collection.

Genus 27. AMANA.

Corpus gracile. Caput et thorax pilosa. Proboscis mediocriter longa. Palpi hirti, capite non longiores ; articulus 3us. conicus, minimus. Antennæ validæ, setaceæ, simplices, subtus subpubescentes. Abdomen thorace multo gracilius. Pedes pilosi ; tibiæ posticæ calcaribus quatuor robustis. Alæ latissimæ ; anticæ triangulares ; posticæ abdomen longe superans.

Body slender. Head and thorax hairy. Proboscis moderately long. Palpi hairy, not extending beyond the head ; third joint conical, very minute. Antennæ stout, setaceous, simple, very minutely pubescent beneath. Abdomen much more slender than the thorax. Wings very broad. Fore wings triangular ; fore border slightly convex ; outer border oblique ; first superior vein simple, second forked near the base ; third forked near the tip, as far from the second as the second is from the first ; first inferior vein nearer to the second than the second is to the third. Hind wings extending far beyond the abdomen. Legs hairy ; hind tibiæ with four stout spurs, two apical and two subapical.

1. AMANA ANGULIFERA.

* *Nigro-fusca; pectus et abdomen subtus lutea; alæ anticæ fasciis tribus flavis apud angulum posticum contiguis, 1a 3aque submarginalibus, 2a discali latiore; posticæ flavo interrupte marginatæ; pedes lutei.*

Blackish brown. Body mostly luteous beneath. Fore wings with three yellow bands which are almost connected on the hind angle; the first straight, near and parallel to the hind border; the third near, but not parallel to the outer border, slightly undulating near the tips of the wings; the second broader, very slightly oblique. Hind wings with an interrupted and dotted luteous hind border. Legs luteous; fore legs mostly brown. Length of the body 7—8 lines; of the wings 22—24 lines.

a. ——— ? From Mr. Stevens' collection.

Genus 28. NUMENES.

Mas. Corpus sat gracile. Caput et thorax hirta. Proboscis brevissima. Palpi hirti, validi, porrecti; articulus 2us 1o multo longior; 3us conicus, minimus. Antennæ sat late pectinatæ, corporis dimidio paullo breviores. Thoracis latera fasciculata. Pedes sat robusti; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latissimæ, anticæ subtrigonæ, apice vix hamatæ; posticæ abdomen longe superantes. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis.

Male. Body rather slender. Head and thorax hairy. Proboscis extremely short. Palpi hairy, stout, porrect; second joint much longer than the first; third conical, very small. Antennæ rather deeply pectinated, somewhat less than half the length of the body. Thorax with two lateral tufts of stout bristles, among which there are a few long hairs. Wings very broad. Fore wings subtriangular, hardly hooked at the tips; fore border convex; outer border oblique; second inferior vein as far from the first as from the third; fourth about six times further from the third than the third is from the second. Hind wings extending far beyond the abdomen. Legs rather stout; fore tibiæ with a thick tuft of stout bristles on the outer side; hind tibiæ with four rather long spurs.

1. Numenes Siletti.

Mas. *Testacea; caput et thorax nigro-fusca; abdomen basi fusco vittatum; pedes antice fusci; alæ anticæ basi, margine postico fasciisque duabus nigro-fuscis; posticæ striga postica fusca.*

Bombyx Siletti, *MSS.*

Testaceous. Head, palpi and thorax brownish black. Antennæ brown. Hind part of thorax with a tuft of testaceous hairs on each side. Abdomen with a short brown stripe at the base. Fore legs brown; fore tibiæ deeply fringed with brown hairs. Fore wings blackish brown at the base and along the hind border to the tips, and with two oblique blackish brown bands, one before one-third, the other before two-thirds, of the length. Hind wings brighter than the fore wings, with a brown streak on the hind border. Length of the body 6—7 lines; of the wings 22—24 lines.

a, b. Silhet. Presented by E. Doubleday, Esq.
c, d. Silhet. From the Rev. J. Stainforth's collection.
e. Java. From the East India Company's collection.

Genus 29. SPILOSOMA.

Palpi breves, subascendentes; articuli 1us et 2us pilosissimi, 1us 2o paullo longior, 3us squamosus, sat parvus, ovatus, subconicus. Maxillæ distinctæ, breves. Antennæ *maris* subbipectinatæ, fœminæ serratæ. Corpus robustum, maculatum. Alæ deflexæ, opacæ. Pedes sat validi; tibiæ anticæ breves, intus spina armatæ, posteriores apice calcaratæ.

Spilosoma, *Steph. Ill. Brit. Ent. Haust.* ii. 74; *Curt.*
Phalæna-Bombyx, p., *Linn.; Barbut; Gmel.; Stew.; Turt.*
Phalæna, p., *Deg.; Marsham; Wilkes; Harr.; Donov.*
Arctia, p., *Schr.; Leach; Meig.; Boisd.*
Bombyx, p., *Fabr.; Oliv.; Esp.; Borkh.; Hübn.; Haw.*
Estigmene, p., *Hübn.*

Europe.

A. Alæ lutescentes, *fœminæ* pallidiores. - lubricipeda, *Linn*
B. Alæ niveæ.
A. Alæ anticæ punctis numerosis nigris. - - Menthastri, *Fabr.*
B. Alæ anticæ punctis duobus nigris. - - Papyratia, *Marsh.*

1. SPILOSOMA MENTHASTRI.

Alæ anticæ albæ aut pallide ochraceæ, punctis numerosis sparsis, lineolisque apicis atris ; posticæ subtus lunula media nigra.

Spilosoma Menthastri, *Steph. Ill. Brit. Ent. Haust.* ii. 75, 1, pl. 11, f. 3. *Westw. & Humph. Brit. Moths*, i. 91, pl. 18, f. 12—14. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 143, 10, 3. *Speyer, Ent. Zeit. Stett.* xiii. 314, 21.

Phalæna-Bombyx lubricipeda (*fœm.*), *Linn. Syst. Nat.* ii. 829, 69 ; *Faun. Suec.* ed. 2, 303, 1138. *Gmel. ed. Syst. Nat.* iv. 2434.

——— ———, *List. Goëd.* (Angl.) 88, f. 76 ; (Lat.) 213, f. 96. *Albin, Nat. Hist. Engl. Ins.* pl. 24, f. g—k. *Roes. Ins.* i. pl. 46.

Phalæna erminea, *Marsham, Linn. Trans.* i. 70, pl. 1, f. 1. *Stew. El.* ii. 154. *Tort. Syst. Nat.* iii. 214.

Phalæna lubricipeda, *Scopoli, Ent. Carn.* 208, 513. *Wilkes*, 20, pl. 40 ; *Harr. Aur.* pl. 38, f. k, l. *Hufnagel, Berl. Mag.* ii. 4, 412, 25. *Naturf.* viii. 104, 25, 26.

Bombyx Menthrastri, *Fabr. Ent. Syst.* iii. 452, 140. *Wien. Verz.* 54, 2. *Schr. Faun. Boic.* ii. 1, 263, 1442. *Borkh. Schmett.* iii. 226, 70. *Oliv. Enc. Méth.* v. 76, 176. *Esp. Schmett.* iii. pl. 66, f. 6—10. *Hübn. Bomb.* pl. 35, f. 152, 153. *Larv. Lep.* iii. *Bomb.* ii. *Veræ.* 2, b, f. 1. *Treits. Hulfsb. Schmett.* 227, 109. *Illig. N. Ausg. dess.* i. 92, 2 ; *Mag.* ii. 47. *Schæff. Nom. Panz.* 122, 177. *Müll. Faun. Fridr.* 42, 374. *Zool. Dan.* 119, 1375. *Vieweg, Tab. Verz.* i. 60, 61. *Lang. Verz.* ii. 94, 731, 732. *Schwarz. Raup.* 674.

Bombyx erminea, *Mag. des Thierr.* i. 1, 5, pl. 1, f. 1.

Bombyx mendica (*fœm.*), *Rossi, Faun Etr.* ii. 174, 1093. *Ed. Illig.* 278, 1093.

Phalæna erminea, *Marsh, Linn. Trans.* i. 70, pl. 1, f. 1.

Bombyx ermineus, *Haw. Lep. Brit.* 111.

Estigmene Menthastri, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hypercompæ Pallidæ*) 184, 1892.

Chelonia Menthrastri, *God. Pap. de France*, iv. 362, pl. 37, f. 5. *Ramb. Faun. Cors.*

Arctia Menthastri, *Schr. Faun. Boic.* ii. 263, 2153, 14. *Meig. Handb.* 145, 106 ; *Syst. Beschr. Eur. Schmett.* iii. 36, 20, pl. 85, f. 9. *Latr. Gen. Crust. et Ins. Koch, Raup. und Schmett. Witten. Isis* (1848) 534.

Eyprepia Menthastri, *Ochs. Schmett. Eur.* iv. 354, 28.

Euprepia Menthastri, *Costa, Faun. Metzner, Ent. Zeit. Stett.* viii. 124.

Var. Spilosoma Walkerii, *Curt. Brit. Ent.* ii. pl. 92.

Var. *Thorax flavescens ; abdomen lutescens, punctis nigris quinque-seriatis ; alæ angustiores, anticæ maculis* 14 *triangularibus inæqualibus, posticæ duabus.*

Spilosoma rivularis, *Ménétriés, Catal. Zool. Caucasc. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 143, 9, 2.
Arctia rivularis, *Boisd. Ind. Méth. Eur. Lep.* 65, 531.

a, *b*. England. Presented by E. Doubleday, Esq.
c. England. From Mr. Foxcroft's collection.
d—*w*. England. From Mr. Stevens' collection.
x—*z*. England.
aa—*bb*. Europe. From M. Becker's collection.

2. Spilosoma Papyratia.

Alæ albæ ; anticæ punctis discalibus lineolaque punctorum nigrorum ad apicem nigris ; posticæ sæpissime immaculatæ.

Var. *Alæ anticæ punctis duobus, posticæ unico, subtus nullis.*

Spilosoma Papyratia, *Steph. Ill. Brit. Ent. Haust.* ii. 76, 3. *Cat. Brit. Lep.* 54, 2.
Spilosoma Urticæ, *Steph. Ill. Brit. Ent. Haust.* ii. 76, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 143, 11, 4. *Speyer, Ent. Zeit. Stett.* xiii. 315, 22.
Estigmene Urticæ, *Hübn. Verz. Schmett.* 184, 1893. *Geoffr. Hist. Ins.* ii. 118, 21. *Roes. Ins.* i. 257, pl. 46, f. 1. *Schæff. Icon.* pl. 114, f. 2, 3; pl. 293, f. 1, 2. *Frisch.* iii. 22, xi. 2, pl. 8. *Pap. d'Eur.* iv. 162, pl. 158, f. 204; pl. 158, f. 204. *Deg. Ins.* i. 1, 5, 132, pl. 11, f. 1—8; 218, 3. *Albin, Nat. Hist. Engl. Ins.* pl. 21, f. 30, e—h.
Phalæna Papyratia, *Marsham, Linn. Trans.* i. 72, pl. 1, f. 4. *Stew. El.* ii. 155. *Turt. Syst. Nat.* iii. 214. *Don. Nat. Hist. Brit. Ins.* xvi. pl. 571.
Bombyx Papyratius, *Haw. Lep. Brit.* 112.
Bombyx Papyracea, *Mag. des Thierr.* i. 1, 9, pl. 1, f. 4.
Bombyx Urticæ, *Haw. Ent. Trans.* i. 366. *Lep. Brit.* 144. *Esp. Schmett.* iii. 20, pl. 83, f. 2. *Hübn. Bomb.* pl. 35, f. 154; *Larv. Lep.* iii. *Bomb.* 2. *Veræ.* 2, b, f, h, c. *Treits. Hulfsb. Schmett.* 227, 110.
Chelonia Urticæ, *God. Pap. de France*, iv. 365, pl. 37, f. 7.
Arctia Urticæ, *Meig. Handb.* 145, 107, *Syst. Beschr. Eur. Schmett*, iii. 37, 21, pl. 85, f. 10. *Koch, Raup. und Schmett. Witter. Ins.* (1848) 533.
Bombyx Menthastri, *var. β, Illig. N. Ausg. des Wien. Verz.* i. 93; *Mag.* ii. 47, 48. *Borkh. Rhein. Mag.* i. 343.

Eyprepia Urticæ, *Ochs. Schmett. Eur.* iv. 357, 29.
Euprepia Urticæ, *Metzner, Ent. Zeit. Stett.* viii. 124.

a—g. England. From Mr. Stephens' collection.
h—k. England.
l, m. Europe. From M. Becker's collection.

3. Spilosoma lubricipeda.

Alæ flavescentes; anticæ striga obliqua fracta punctorum nigrorum; thorax et anus lutei.

Spilosoma lubricipeda, *Steph. Ill. Brit. Ent. Haust.* ii. 77, 4. *Westw. & Humph. Moths.* i. 92, pl. 18, f. 17—19. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 143, 8, 1. *Speyer, Ent. Zeit. Stett.* xiii. 314, 20.

Phalæna-Bombyx lubricipeda, *Linn. Syst. Nat.* ii. 839; *Faun. Suec.* 1138. *Barbut, Gen.* pl. 10, f. 69. *Gmel. ed. Syst. Nat.* i. 5, 24, 34, 69. *Berk. Syn.* i. 138. *Marsham, Linn. Trans.* i. 71, pl. 1, f. 2. *Stew. El.* ii. 155. *Turt. Syst. Nat.* iii. 214. *Don. Hist. Nat. Brit. Ins.* xvi. pl. 568.

——— ——— *List. Goëd.* (*Angl.*) 87, f. 93; (*Lat.*) 210, f. 93. *Albin, Nat. Hist. Eng. Ins.* pl. 24, f. 25, a—e. *Wilkes, Nat. Hist.* pl. 41. *Harr. Aur.* pl. 17, f, g—i. *Röes. Ins.* i. pl. 47, *Deg.* i. 132, pl. 11, f. 1. *Schæff. Icon.* pl. 24, f. 8, 9. *Frisch. Beschr. Ins.* iii. 21, xi. 2, pl. 8. *Sepp. Neederl. Ins.* ii. pl. 2, f. 1—11. *Mag. der Theirr.* i. 1, 6, pl. 1, f. 2. *Pap. de France*, iv. 159, pl. 157, f. 203, a—g. *Naturf.* viii. 104, 25, 26.

Phalæna Lepus, *Retz. Gen.* 37, 47.

Phalæna lubricipeda, *Wilkes*, pl. 21, f. 43. *Hufnagel, Berl. Mag.* ii. 4, 412, 26, pl.

Bombyx lubricipedatus, *Haw. Lep. Brit.* 110.

Estigmene lubricipeda, *Hübn. Verz. Schmett.* 1895, 184.

Bombyx lubricipeda, *Fabr. Ent. Syst.* iii. 1, 451, 138. *Oliv. Enc. Méth.* v. 75, 175. *Wien. Verz.* 54, F. 1. *Borkh. Schmett.* iii. 222, 69. *Rhein. Mag.* i. 342, 182. *Illig. N. Ausg. dess.* i. 91, 1; *Mag.* ii. 47. *Schæff. Nomencl. Panz.* 37. *Esp. Schmett.* iii. pl. 66, f. 1—5. *Fuessl. Schw Ins.* 36, 681, *A. Mag.* ii. 1, 7. *Hübn. Bomb.* pl. 35, f. 155, 156. *Larv. Lep.* iii. *Bomb.* ii. *Veræ.* 2, d, f. d, e. *Vieweg, Tab. Verz.* i. 59, 60. *Rossi, Faun. Etr.* ii. 173, 1090; *Ed. Illig.* 277, 1090. *Lang. Verz.* ii. 94, 727, 730. *Brahm, Ins. Kal.* 377, 253. *Schwarz, Raup.* 240, 385, 529. *Treits. Hulfsb. Schmett.* 228, 111.

Chelonia lubricipeda, *God. Pap. de France*, iv. 358, pl. 37, f. 3.

Eyprepia lubricipeda, *Ochs. Schmett.* iii. 358, 30; iv. 61, 32.

Arctia lubricipeda, *Schr. Faun. Boic.* ii. 1, 264, 1443; 2, 153, 15, *Meig. Handb.* 145, 108; *Syst. Beschr. Eur. Schmett.* iii. 37. 22, pl. 85, f. 8. *Latr. Gen. Cr. et Ins. Koch, Raup. und Schmett. Witter. Isis* (1848), 532. *Vieweg, Tab. Verz.* i. 59, 60. *Rossi, Faun. Etr.* ii. 173, 1090; *Ed. Illig.* 277, 1090. *Lang. Verz.* ii. 94, 727, 730. *Brahm, Ins. Kal.* 377, 253. *Schwarz, Raup.* 240, 385, 529.

Var. *Alæ anticæ nigræ macula magna lobata variisque flavicantibus.*

Bombyx radiatus, *Haw. Ent. Trans.* i. 336.
Spilosoma radiata, *Steph. Ill. Brit. Ent. Haust.* ii. 77, 5. *Westw. and Humph. Moths.* i. 92, pl. 18, f. 19.
Var. Bombyx Luxerii, *God. Pap. de France*, iv. 360, pl. 37, f. 4.
Arctia Luxerii, *Meig. Syst. Beschr. Eur. Schmett.* iii. 38, 23, pl. 85, f. 7.

a, *b*. England. Presented by E. Doubleday, Esq.
c—*t*. England. From Mr. Stephens' collection.
v—*bb*. England.
cc—*dd*. Europe. From M. Becker's collection.

North America.

A. Alæ anticæ albæ.
  A. Abdomen maculis dorsalibus nigris.
    a. Alæ posticæ *maris* fulvæ. - - - Acrea, *Drury*.
    b. Alæ posticæ *maris* albæ.
      a. Alæ anticæ venis nigro marginatis. - Echo, *Abbot*.
      b. Alæ anticæ venis non marginatis. - Virginica, *Fabr*.
  B. Abdomen non maculatum.
    a. Alæ sat angustæ. - - - - - Cunea, *Drury*.
    b. Alæ latæ. - - - - - congrua, *Walk*.
B. Alæ anticæ subcinereæ. - - - - Egle, *Drury*.

4. Spilosoma Acrea.

Alæ niveæ (*posticæ* maris *fulvæ*), *punctis nigris, costalibus majoribus; abdominis dorsum fulvum, nigro maculatum.*

Spilosoma Acrea, *Westw. Ed. Drury*, i. 7, pl. 3, f. 2, 3.
Fœm. Phalæna (Bombyx) Acrea, *Drury, Ins. Exot.* i. 7, pl. 3, f. 2. *App.* ii.
Mas. Phalæna (Bombyx) Caprotina, *Drury, Ins. Exot.* i. 7, pl. 3, f. 3. *App.* ii.
Phalæna Caprotina, *Cram. Pap. Exot.* iii. 170, pl. 287, f. C.

Bombyx Acria, *Fabr. Ent. Syst.* iii. 1, 451, 137. *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* 133, pl. 67.
Arctia Pseudermineà (*Peck*), *Harris, Ins. Massachus. Agricult. Repos.* vii. 328, pl. . *The Natural History of the Salt Marsh Caterpillar.*
Estigmene Acria, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phalænæ*, ii. *Veræ*, ix. *Hypercompæ*, *B. Pallidæ*, 2, f. 1—4; *Verz. Schmett.* 184, 1891.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.
e—g. United States. From Mr. Milne's collection.
h. Massachusetts. From Prof. Sheppard's collection.
i. United States.

5. Spilosoma Echo.

Alæ niveæ, venis utrinque nigro marginatis; abdomen luteum nigroque maculatum.

Phalæna Echo, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 135, pl. 68.
Estigmene Echo, *Hübn. Verz. Schmett.* 184, 1897.
Georgia.

6. Spilosoma Virginica.

Alba; abdomen e guttis nigris trivittatum, lateribus luteis; pedes antici nigro luteoque varii; alæ nonnunquam guttis paucissimis nigris.

Bombyx Virginica, *Fabr.*

Var. α. Wings wholly white.
Var. β. Fore wings with one black dot.
Var. γ. Fore wings with one black dot; hind wings with two black dots.
Var. δ. Fore wings with two black dots; hind wings with two black dots.
Var. ε. Fore wings with three black dots; hind wings with three black dots.

a—e. Trenton Falls, New York. Presented by E. Doubleday, Esq.
f, g, St. Martin's Falls, Albany River, Hudson's Bay. Presented by E. Doubleday, Esq.
h—j. Georgia. From Mr. Milne's collection.
k. Nova Scotia.

7. Spilosoma Cunea.

Alæ albæ, anticæ maculis plurimis, posticæ duabus nigris; abdomen concolor, nigro maculatum.

Spilosoma Cunea, *Westw. Ed. Drury*, i. 34, pl. 18, f. 4.
Phalæna (Bombyx) Cunea, *Drury, Ins.* i. 36, pl. 18, f. 4. *App.* ii.
Phalæna punctatissima, *Abbot & Smith, Ins. Nat. Hist. Lep, Georg.* 139, pl. 70.
Cycnia Cunea, *Hübn. Verz. Schmett.* 184, 1902.

New York. Georgia. Virginia.

White. Abdomen yellowish, white on the hind borders of the segments and towards the tip, and with one dorsal, one ventral, and two lateral stripes of black spots. Fore wings with four irregular oblique macular more or less imperfect brown bands. *Female.*—Hind wings with some brown submarginal spots. Length of the body 5—6½ lines; of the wings 13—18 lines.

a—f. Georgia. From Mr. Milne's collection.
g, h. New York. From Mr. Milne's collection.

8. Spilosoma congrua.

Alba; palpi supra nigri; pedes antici nigro luteoque varii. Mas. *—Caput et thorax anticus subtestacea; alæ anticæ e guttis fuscis quadrisubfasciatæ.*

White. Tarsi with black bands. Fore coxæ and fore femora luteous, with black spots on the inner side; fore tibiæ striped with black on the inner side. *Male.*—Head and fore part of the thorax with a slight testaceous tinge. Fore wings with four oblique very imperfect and irregular bands, composed of pale brown dots. Length of the body 6—7 lines; of the wings 16—20 lines.

a—c. Georgia. From Mr. Milne's collection.

9. Spilosoma Egle.

Alæ subcinereæ immaculata; abdomen luteum, maculis dorsalibus nigris.

Phalæna (Bombyx) Egle, *Drury, Ins. Exot.* ii. 36, pl. 20, f. 3. *App.* ii.
Spilosoma Egle, *Westw. Ed. Drury*, ii. 38, pl. 20, f. 3.

a. United States. Presented by E. Doubleday, Esq.
b, c. United States. From Mr. Milne's collection.

West Indies.

10. Spilosoma Jussiææ.

Alæ albæ; anticarum supra, posticarum subtus puncto medio nigro; femora antica et abdominis latera fulva; abdomen quintuplici serie punctorum notatum.

Arctia Jussiææ, *Poez, Cent. Lep. Cuba*, pl.

Cuba.

Larva feeds on the leaves of Jussiæa erecta.

Africa.

A. Alæ testaceæ.
  A. Alæ anticæ nigro guttatæ. - - - testacea, *Walk.*
  B. Alæ anticæ nigro bivittatæ. - - - linea, *Walk.*
  C. Alæ anticæ nigro trivittatæ. - - - dorsalis, *Walk.*
  D. Alæ anticæ fusca trifasciatæ. - - curvilinea, *Walk.*
  E. Alæ anticæ supra immaculatæ.
    a. Abdomen non fasciatum. - - - submacula, *Walk.*
    b. Abdomen nigro fasciatum. - - - lutescens, *Walk.*
B. Alæ niveæ anticæ fusco venosæ. - - - lineata, *Walk.*
C. Alæ anticæ albæ, nigro univittatæ et maculatæ. punctivitta, *Walk.*
D. Alæ anticæ albæ, nigro trivittatæ. - - trivitta, *Walk.*
E. Alæ totæ albæ. - - - - - - innotata, *Walk.*

11. Spilosoma testacea.

Mas. *Testacea; palpi antennæque nigra; thorax nigro biguttatus; abdomen luteum, fasciis abbreviatis nigris; pedes supra tarsique toti nigra; alæ anticæ guttis quatuor discalibus unaque basali nigris; posticæ gutta fusca discali.*

Male. Pale testaceous. Palpi and antennæ black. Thorax with a black dot on each side. Abdomen above luteous, with a short black band on each segment. Femora and tibiæ above and tarsi black. Fore wings with a few black dots in the disk, and one at the base. Hind wings with a brown discal dot, sometimes almost obsolete above, more apparent beneath, where there is another brown dot near the hind border. Length of the body 6—7 lines; of the wings 15—17 lines.

a. Port Natal. From M. Gueinzius' collection.
b. Zoolu Country, South Africa. Presented by G. F. Angas, Esq.

12. SPILOSOMA LINEA.

Testacea; palpi extus nigri; abdomen supra luteum, e guttis nigris trivittatum; femora supra lutea, apice nigra; alæ anticæ vittis duabus nigris, antica subfurcata.

Testaceous. Palpi black on the outer side. Antennæ black, partly with testaceous tomentum. Abdomen pale luteous above, with one dorsal and two lateral stripes of black dots. Femora luteous above, with black tips. Fore wings with a slender black discal stripe, extending along the hind border of the discal areolet, and very slightly forked along the inferior veins; a posterior submarginal indistinct and imperfect stripe. *Male.*—Paler than the female. Length of the body 5—6 lines; of the wings 14—17 lines.

a. West Africa. From Mr. Stevens' collection.
b, c. South Africa. From Mr. Argent's collection.
d. Port Natal. From M. Gueinzius' collection.
e. South Africa. Presented by Dr. A. Smith.

13. SPILOSOMA DORSALIS.

Mas. *Testacea; antennæ nigræ; thorax fusco trivittatus; abdomen supra luteum, e guttis nigris trivittatum; alæ anticæ vittis tribus fuscis, 1a costali fusca bifurcata, 2a trifurcata, 3a simplici.*

Male. Testaceous. Antennæ black, with testaceous tomentum. Thorax rather darker in front, with three brown stripes, the middle one broader and longer than the lateral pair. Abdomen pale luteous above, with three stripes of black dots. Fore wings with a brown interruptedly bifurcate stripe along the costa, with a trifurcate brown discal stripe, and with a simple brown stripe along the interior border. Length of the body 6 lines; of the wings 15 lines.

This may be a variety of the preceding species.

a. South Africa. From Mr. Argent's collection.

14. SPILOSOMA CURVILINEA.

Subtestaceo-albida; caput et abdomen luteum; palpi supra nigri; alæ anticæ fusco trifasciatæ, posticæ gutta fusca.

Whitish, with a very slight testaceous tinge. Head luteous Palpi black, luteous beneath. Antennæ black, with white tomen-

tum. Abdomen luteous. Fore wings with three slender brown bands; the first very slightly undulating; the second and third deeply undulating, especially the second; both rather broader towards each end. Hind wings with a brown anterior dot. Wings beneath luteous along the costa. Length of the body 5—6 lines; of the wings 12—14 lines.

a, *b*. Congo. Presented by Sir J. Richardson.

15. Spilosoma submacula.

Fœm. *Pallide testacea; palpi supra rufi, apice nigri; thorax nigro biguttatus; abdomen basi rufo hirtum; alæ anticæ subtus posticæque supra gutta discali nigra.*

Female. Pale testaceous. Palpi red above, black towards the tips. Antennæ black, with testaceous tomentum. Thorax with a black dot on each side. Abdomen with red hairs towards the base. Coxæ and femora red above; femora with black tips; tarsi with black bands; fore tibiæ black above. Fore wings tinged with red along the costa beneath; a black spot beneath at the tip of the discal areolet. Hind wings red along the interior border, with a black spot at the tip of the discal areolet. Length of the body 7 lines; of the wings 20 lines.

a. Port Natal. From M. Gueinzius' collection.

16. Spilosoma lutescens.

Mas et fœm. *Testacea; caput luteo fasciatum; thorax luteo fasciatus et bivittatus; abdomen fasciis dorsalibus guttisque lateralibus nigris; tarsi fusci; alæ innotatæ.*

Male and female. Testaceous. Head with a luteous hind band. Thorax with a luteous band in front of the fore wings, and with two indistinct luteous stripes. Abdomen with black dorsal bands, and with two lateral rows of black dots. Tarsi brown. Wings wholly testaceous. Length of the body 6—7 lines; of the wings 16—20 lines.

a, *b*. Sierra Leone. Presented by the Rev. D. F. Morgan.
c. South Africa. Presented by Dr. A. Smith.

17. Spilosoma lineata.

Nivea; caput postice et thoracis latera subtestacea; palpi testacei, supra nigri; antennæ nigræ; abdomen supra luteum, e maculis nigris trivittatum; pedes nigro vittati, coxis femoribusque luteo vittatis, tarsis nigris; alæ anticæ fusco venosæ.

Male and female. Pure white. Hind part of the head and sides of the thorax slightly testaceous. Palpi testaceous, black above. Antennæ black. Abdomen luteous above, with three rows of black spots. Legs with black stripes; coxæ and femora with luteous stripes; tarsi black. Fore wings with brown veins. Length of the body 6—7 lines; of the wings 17 lines.

Var. β. Hind wings with a testaceous stripe along the inner border.

a—c. Port Natal. From M. Becker's collection.

18. Spilosoma? punctivitta.

Fœm. *Alba; palpi fusci, subtus albidi; antennæ nigræ; abdomen supra rufum, e maculis nigris univittatum; pedes nigricantes, femoribus supra luteis apice nigris; alæ anticæ vitta discali gracili maculisque subapicalibus nigris; posticæ albæ.*

Female. White, with a slight testaceous tinge. Palpi brown, whitish beneath. Antennæ black, white beneath. Pectus with brown hairs. Abdomen above bright red, with a row of black spots. Legs blackish, femora above luteous, with black tips. Fore wings with a slender black discal stripe for half the length from the base, and with five or six black dots beyond. Hind wings white. Length of the body 6—7 lines; of the wings 15—16 lines.

a. Port Natal. From M. Gueinzius' collection.

19. Spilosoma? trivitta.

Mas et fœm. *Albida; palpi fusci, subtus testacei; antennæ nigræ; thorax nigro trivittatus; abdomen supra luteum basi album, apice e maculis nigris trivittatum, subtus nigro bivittatum; pedes nigri, femoribus tibiisque albo vittatis, femoribus supra luteis; alæ anticæ nigro trivittatæ; posticæ albæ.*

Male and female. White. Palpi brown, testaceous beneath. Antennæ black, testaceous at the base. Thorax and fore wings with a slight testaceous tinge. Thorax with three black stripes. Abdomen above luteous, white at the base, and at the tip with three rows of black spots; under side with two black stripes. Legs black; femora luteous above, with black tips; femora and tibiæ with white stripes. Fore wings with three black stripes; the first and the third obsolete towards the base. Hind wings white. Length of the body 6 lines; of the wings 16—18 lines.

a, b. Port Natal. From M. Gueinzius' collection.

20. Spilosoma innotata.

Mas. *Alba; palpi testacei; pedes graciles; alæ immaculatæ.*

Male. White. Palpi testaceous. Antennæ with white tomentum. Legs slender. Wings wholly white. Length of the body 5 lines; of the wings 16 lines.

a. Egypt. Presented by J. Burton, Esq.

Asia.

A. Alæ anticæ flavescentes.
  A. Alæ anticæ maculis duabus punctisque nigris. Indica, *Guér.*
  B. Alæ anticæ guttis nonnullis nigris.
    A. Abdomen supra rufum. - - - sublutea, *Walk.*
    B. Abdomen supra luteum. - - - subfascia, *Walk.*
  C. Alæ anticæ nigro quadriguttatæ et unimaculatæ. transiens, *Walk.*
  D. Alæ anticæ punctis geminatis nigris. - casigneta, *Kollar.*
  E. Alæ anticæ fasciis tribus macularibus fuscis. maculifascia, *Walk.*
  F. Alæ anticæ fasciis duabus fuscis. - - rubescens, *Walk.*
  G. Alæ anticæ luteæ, fusco costatæ. - costata, *Boisd.*
B. Alæ anticæ cervinæ. - - - - - suffusa, *Walk.*
C. Alæ anticæ albæ.
  A. Alæ anticæ striis longitudinalibus nigris. quadriramosa, *Kollar.*
  B. Alæ anticæ puncto medio nigro. - - alba, *Bremer.*
  C. Alæ anticæ gutta strigaque subapicali nigris. punctistriga, *Walk.*
  D. Alæ anticæ guttis paucis nigris. - - - bifrons, *Walk.*
  E. Alæ anticæ totæ albæ.
    A. Alæ posticæ punctis nigris. - - erythrozona, *Kollar.*
    B. Alæ posticæ macula submarginali fusca. subcarnea, *Walk.*

21. Spilosoma Indica.

Alæ; caput et thorax albo-subflavescentia; alæ anticæ punctis minutissimis nigris, subtus macula media fasciaque subapicali fuscis; posticæ maculis duabus, costali et anali, nigris, subtus maculis tribus fuscis; abdomen supra flavum, subtus album, punctis lateralibus nigris; pedes albo fusci, femoribus supra rufis.

Arctia Indica, *Guér. Voy. Delessert, Hist. Nat.* 93.

Neilgherry Mountains.

22. SPILOSOMA TRANSIENS.

Fœm. *Albida; palpi testacei, apice nigri; antennæ nigræ; abdomen supra luteum, e guttis nigris trivittatum; pedes nigro-luteoque vittati; alæ subtestaceæ, anticæ nigro quadriguttatæ et unimaculatæ, posticæ maculis submarginalibus nigris.*

Female. Whitish. Palpi testaceous, black towards the tips. Antennæ black. Abdomen luteous above, with three rows of black dots. Legs with black stripes; coxæ and femora with luteous stripes. Wings slightly testaceous. Fore wings with four black dots at the tip of the discal areolet, and with a black spot by the internal angle. Hind wings with a hind row of black submarginal spots. Length of the body 6—7 lines; of the wings 18—20 lines.

Var. β. Thorax with two testaceous stripes. Fore wings without the hind spot.

Var. γ like *var.* β. Thorax with one testaceous stripe. Hind wings without the hind spots.

a, *b*. North India. From Mr. Stevens' collection.
c, *d*. Silhet. From Mr. Sowerby's collection.
e. East Indies. From Archdeacon Clerk's collection.
f. Celebes. From Madame Ida Pfeiffer's collection.

23. SPILOSOMA QUADRIRAMOSA.

Alba; thorax nigro maculatus et vittatus; abdomen flavum nigro maculatum; alæ anticæ striis longitudinalibus, altera triramosa; altera simplici linieolisque ad marginem externum nigris; posticæ punctis tribus marginalibus ejusdem coloris.

Euprepia quadriramosa, *Kollar, Kaschmir, von Von Hugel*, 468, 6.

Himalaya Mountains.

24. SPILOSOMA ERYTHROZONA.

Alba; abdomen nigrum, rubro annulatum; alæ posticæ punctis aliquot obsoletis nigris.

Euprepia erythrozona, *Kollar, Kaschmir, von Von Hugel.* 468, 7.

Himalaya Mountains.

25. SPILOSOMA SUBCARNEA.

Fœm. *Albida; palpi supra rufi, apice nigri; abdomen supra rufum vittis tribus macularibus nigris, apice album; pedes rufo-nigroque varii; alæ posticæ macula submarginali fusca.*

Female. Whitish. Palpi red, with black tips, white beneath. Antennæ black, mostly white on each side. Abdomen bright red

above, excepting the tip, with one dorsal and two lateral stripes of black spots. Fore coxæ bright red, striped with black; femora with black tips, above bright red, which colour is most prevalent on the fore legs; anterior tibiæ and anterior tarsi black above; hind tarsi black, with a white band. Hind wings a little paler than the fore wings, with a brown posterior submarginal spot. Length of the body 7½ lines; of the wings 24 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

26. SPILOSOMA CASIGNETA.

Flavescens; abdomen rubrum nigro trifariam punctatum; alæ anticæ punctis numerosis geminatis, posticæ solitariis nigris.

Euprepia casigneta, *Kollar, Kaschmir, von Von Hugel*, 469, 8.

Himalaya Mountains.

27. SPILOSOMA ALBA.

Alba; antennæ nigræ; thorax punctis duobus nigris; abdomen supra sanguineum, superne et a latere punctis nigris albo annulatis; corpus subtus punctis lateralibus nigris; pedes sanguinei; alæ puncto mediano nigro.

Chelonia alba, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China*, ii. 15, 71.

North China.

28. SPILOSOMA PUNCTISTRIGA.

Fœm. *Alba; palpi supra apice nigri; antennæ nigræ, basi rufæ; abdomen supra luteum, e guttis nigris trivittatum; pedes rufo-nigroque varii; alæ anticæ gutta discali strigaque subapicali nigris, costa subtus rufa.*

Female. White. Palpi black above towards the tips. Antennæ black, with white tomentum, red at the base. Abdomen luteous above, with three rows of black dots. Coxæ and femora with red stripes, the latter with black tips; tibiæ with black stripes. Fore wings with a black dot at the tip of the discal areolet, and with a black streak beyond in front of the first inferior vein; costa red beneath. Length of the body 4 lines; of the wings 11 lines.

a. North India. From Mr. Stevens' collection.

29. SPILOSOMA MACULIFASCIA.

Fœm. *Testacea; antennæ nigræ; thorax fusco quadrimaculatus; pedes supra fuscescentes; alæ anticæ e maculis fuscis trifasciatæ, posticæ albidæ maculis duabus posticis.*

Female. Testaceous. Antennæ black. Thorax with two small dark brown spots on each side. Legs mostly brown above. Fore wings paler than the body, with three oblique bands of brown spots across the disk, and with a few more brown spots towards the base and towards the tip. Hind wings whitish, with two brown spots near the inner angle. Length of the body 7 lines; of the wings 20 lines.

a. Java. From the East India Company's collection.

30. SPILOSOMA RUBESCENS.

Testacea; palpi nigri; pectus rufescens; abdomen supra rufum, vittis guttularibus nigris; pedes rufi, tibiis tarsisque nigris; alæ anticæ fasciis duabus obliquis guttularibus indistinctis fuscis; posticæ maculis tribus submarginalibus unaque discali nigris.

Testaceous. Palpi black. Pectus with reddish hairs. Abdomen above red, with rows of black dots. Legs red; tibiæ and tarsi black. Fore wings with a few indistinct brown dots, arranged in two or three imperfect oblique bands, and sometimes quite obsolete. Hind wings red, with a black discal spot and three black posterior submarginal spots. Length of the body 6—7 lines; of the wings 16—20 lines.

a, b. East Indies. From Archdeacon Clerk's collection.
c. Borneo. From Mr. Low's collection.

31. SPILOSOMA COSTATA.

Abdomen punctis nigris serie triplici digestis; alæ quatuor luteæ; anticæ fusco costatæ.

Chelonia costata, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 213, 1, pl. 5, f. 6.

Port Praslin, New Ireland.

32. SPILOSOMA SUFFUSA.

Cervina; palpi et antennæ nigra; abdomen supra rufum; pedes rufo-nigroque varii. Mas.—*Abdomen nigro trivittatum; alæ anticæ fasciis duabus incompletis obliquis nigricantibus; posticæ gutta discali maculisque tribus submarginalibus nigris.* Fœm.—*Alæ anticæ subtus rufescentes, gutta subcostali nigra; posticæ guttis tribus nigricantibus albido marginatis.*

Fawn-colour. Palpi and antennæ black. Abdomen red above. Coxæ and femora red above, streaked with black; tibiæ and tarsi

black above. *Male.*—Fore wings with two irregular and imperfect oblique blackish bands beyond the middle. Hind wings with a black discal dot and three black submarginal spots. Abdomen with three black stripes. *Female.*—Fore wings reddish beneath, with a middle subcostal black dot. Hind wings with three blackish whitish-bordered dots; two of them submarginal, the third discal, and most apparent beneath. Length of the body 6—8 lines; of the wings 16—22 lines.

a, *b*. Punjaub. Presented by Brigadier Hearsay.

Var. Fem. *Testacea; palpi nigri; abdomen supra rufum, e maculis nigris trivittatum; alæ anticæ guttis nonnullis nigris.*

Var. β. Female. Testaceous, with a slight luteous tinge. Palpi and antennæ black. Abdomen red above, with one dorsal and two lateral stripes of black spots. Fore wings with one basal, one posterior at one-fourth of the length, a few discal, and two or three submarginal black dots; the discal dots forming a very slight and oblique band.

Var. γ like *var. β.* Submarginal and discal spots wanting, with the exception of the two hindermost of the latter. Length of the body 7—8 lines; of the wings 20—24 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.
b. North India. Presented by E. Doubleday, Esq.
c. North Bengal. Presented by W. W. Saunders, Esq.
d. North India. Presented by Brigadier Hearsay.

33. Spilosoma subfascia.

Isabellina; palpi antennæque nigra; thorax fascia antica maculisque duabus nigris; abdomen supra luteum, e maculis nigris trivittatum; pedes nigro varii; alæ anticæ guttis costalibus, una subapicali unaque postica nigris; posticæ guttis posticis nigris. Mas.—*Alæ anticæ fascia obliqua maculari nigra; posticæ apud marginem luteæ fasciaque brevi nigra.*

Cream-colour. Palpi and antennæ black. Thorax with a black spot on each side, and with an indistinct testaceous band in front. Abdomen luteous above, with three rows of black spots. Tarsi, anterior tibiæ and fore femora above black; posterior femora and hind tibiæ with black tips. Fore wings with black costal dots, with one subapical dot, and with one posterior dot. Hind wings with some black dots by the internal angle. *Male.*—An oblique macular black band between the subapical and posterior dots; two dots near the tip of the exterior border. Hind wings luteous along

the internal border, with some black apical dots, and with a short black band by the internal angle. *Female.*—Abdomen thickly tufted with testaceous hairs at the tip. Length of the body 6—8 lines; of the wings 16—24 lines.

a, *b*. Ceylon. Presented by R. Templeton, Esq.

Australia.

34. SPILOSOMA OBLIQUA.

Mas. *Testacea; palpi et antennæ nigra; abdomen supra rufescens, e guttis nigris trivittatum; pedes nigri, femoribus rufis apice nigris; alæ anticæ e guttis nigris vix bifasciatæ, posticæ macalis quatuor nigris.* Fœm.—*Alba; caput subtus et abdomen supra rufa; alæ anticæ strigis duabus obliquis nigris.*

Male. Pale testaceous. Palpi and antennæ black. Abdomen above reddish, with three rows of black dots; under side with two rows of black dots. Legs black; femora red, with black tips, fringed beneath with white hairs; fore tibiæ beneath with a thick tuft of pale testaceous hairs. Fore wings with black dots, most of which form two much interrupted and very imperfect oblique bands. Hind wings with one anterior discal and three posterior submarginal black spots. *Female.*—White. Head bright red beneath. Abdomen above bright red. Tibiæ and tarsi white beneath. Fore wings with two oblique streaks extending from the costa to the disk, and at a right angle to the bands before mentioned. Like the male in other respects. Length of the body 5—7 lines; of the wings 14—22 lines.

a—*c*. Sydney. Presented by E. Doubleday, Esq.
d. New South Wales. From Mr. Wood's collection.

35. SPILOSOMA? FULVIA.

Alæ quatuor concolores fulvæ; anticæ punctis duobus nigris ad basim costæ, venis fuscis.

Bombyx Fulvia, *Donov. Epit. Ins. New Holl.* Pl.
Chelonia Fulvia, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 214, 2.

This species may belong to the genus *Aganais*.

New Holland.

Genus 30. CYCNIA.

Palpi distincti, mediocres, descendentes; articuli subæquales, cylindrici, 1us et 2us pilosissimi, 1us incurvus, 3us squamosus, obtusus, gracilior. Proboscis capite paullo longior. Antennæ *maris* bipectinatæ, *fœm.* serratæ. Thorax crassus, valde lanuginosus. Corpus maculatum. Alæ subdiaphanæ, squamis rarioribus adspersæ. Pedes breves, validi; tibiæ anticæ breves, spina intus armatæ, posticæ apice calcaratæ.

Cycnia, *Hübn. Verz. Schmett.* 184.
Phalæna Bombyx, p., *Linn.; Clerck; Gmel.; Marsham; Stew.; Turt.; Don.*
Bombyx, p., *Fabr.; Borkh.; Esp.; Hübn.; Haw.; Treits.*
Eyprepia, p., *Ochs.*
Arctia, p., *Schr.; Meig.*
Chelonia, p., *God.*
Diaphora, *Steph. Ill. Brit. Ent. Haust.* ii. 77.

Europe.

A. *Mas.* cervino-cinereus. *Fœm.* alba. - - mendica, *Linn.*
B. *Mas.* nigro fuliginosus.
A. Femora antica rosea. Alæ et ciliæ inter costas nigro maculatæ. - - - - - - - luctuosa, *Freyer.*
B. Femora cinerea. Alæ anticæ strigis tribus transversis obscurioribus. - - - - - - - sordida, *Hübn.*

1. Cycnia mendica.

Alæ atro punctatæ, maris *cinereæ*, fœminæ *albæ*; *pedes antici lutei.*

Cycnia mendica, *Hübn. Verz. Schmett.* 184, 1900. *Westw. & Humph.* i. 92, pl. 18, f. 20—22. *Steph. Cat. Brit. Lep.* 55.
Diaphora mendica, *Steph. Ill. Brit. Ent. Haust.* ii. 78, 1. *Wing, Trans. Ent. Soc.* v. 120, pl. 14, f. 5.
Phalæna (Bombyx) mendica, *Linn. Syst. Nat.* ii. 822, 1127. *Faun. Suec. Ed.* ii. 299, 1127. *Gmel. Ed. Syst. Nat.* i. 5, 2423, 47. *Clerck, Icon.* pl. 3, f. 5. *Marsh. Linn. Trans.* i. 72, pl. 1, f. 3. *Stew. Elem.* ii. 153. *Turt. Syst. Nat.* iii. 214. *Don. Nat. Hist. Brit. Ins.* xi. 77, pl. 388.
Bombyx mendica, *Fabr. Ent. Syst.* iii. 1, 452, 139. *Oliv. Enc. Méth.* v. 76, 177. *Wien. Verz.* 54, F. 3. *Borkh. Schmett.* iii.

229, 71. *Rhein. Mag.* i. 343, 185. *Esp. Schmett.* iii. pl. 42, f. 1—9. *Illig. N. Ausg. dess.* i. 93, 3. *Knoch, Beitr.* iii. 47, 6, pl. 2, f. 5—13. *Fuessl. Schw. Ins.* 35, 664. *Panz. Faun. Germ.* 46, 23, 24. *V. Müll. Faun. Siles.* iii. 1. *H. Naturf.* viii. 109, 45. *Vieweg, Tab. Verz.* i. 60, 62. *Rossi, Faun. Etr.* ii. 174, 1093; *Ed. Illig.* 278, 1093. *Lang. Verz.* ii. 94, 723—726. *Schwarz. Raup.* 378, 522, 713. *Ernst, Pap. de France*, iv. 165, pl. 159, f. 205 a—h. *Hübn. Bomb.* 140, 7, pl. 34, f. 148, 149. *Treits. Hulfsb. Schmett.* 226, 108.

Chelonia mendica, *God. Pap. de France*, iv. pl. 37, f. 1, 2.

Eyprepia mendica, *Ochs. Schmett.* iii. 351, 27; iv. 61, 28.

Arctia mendica, *Schr. Faun. Boic.* ii. 2, 153, 16. *Meig. Handb.* 144, 105; *Syst. Beschr. Eur. Schmett.* iii. 36, 19, pl. 85, f. 6. *Koch, Raup. und Schmett. Witter. Isis* (1848) 535.

Phalæna murina, *Hufnagel, Pl. Berl. Mag.* ii. 4, 424, 45.

Bombyx mendicus, *Haw. Lep. Brit.* 112.

Spilosoma mendica, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 143, 12, 5. *Speyer, Ent. Zeit. Stett.* xiii. 314, 19.

Var. Bombyx rustica, *Hübn. Bomb.* 150.

Cycnia egena, *Hübn. Verz. Schmett.* 184, 1901.

Spilosoma mendica, *var.* rustica, *Speyer, Ent. Zeit. Stett.* xiii. 314.

a—n. England. From Mr. Stephens' collection.
o—t. England.
v—x. Europe. From M. Becker's collection.
y. Europe. From Mr. Milne's collection.
z—aa. Europe.

2. Cycnia luctuosa.

Nigro-fuliginosa; alæ et ciliæ inter costas nigro maculatæ; femora antica rosea.

Bombyx (Eyprepia) luctuosa, *Fryer, Neuere Beitr. Schmett.* iii. 94, pl. 260.

Spilosoma luctuosa, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 144, 13, 6.

a, b. Europe. From M. Becker's collection.

3. Cycnia sordida.

Mas. *Nigro-fuliginosus;* fœm. *cinerea; alæ anticæ strigis tribus transversis obscurioribus et lunula media inter ambas posteriores.*

Noctua semicana, *Esp. Noct.* 110, 5.

Cycnia sordida, *Hübn. Verz. Schmett.* 184, 1899.

Chelonia sordida, *Boisd. Icon. Hist. Lépid.* ii. 132, 6, pl. 60, f. 2—4.

Spilosoma sordida, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 144, 7. *Speyer, Ent. Zeit. Stett.* xiii. 314, 18.

*Switzerland. North Italy.

North America.

4. CYCNIA DUBIA.

Fusca; thorax cervinus; abdomen e maculis nigris trivittatum; alæ fasciis duabus obliquis macularibus subobsoletis nigricantibus, anticæ albo venosæ.

Chelonia dubia, *Barnston MSS.*

Female. Pale brown. Antennæ and legs with whitish tomentum. Thorax fawn-colour, whitish behind. Abdomen somewhat ferruginous, with three stripes of black spots. Wings with two oblique incomplete indistinct brown bands, composed of blackish spots. Fore wings with whitish veins. Length of the body 5 lines; of the wings 16 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Asia.

A. Alæ anticæ fuscæ. - - - - punctivaga, *Walk.*
B. Alæ anticæ testaceæ. - - - - testacea, *Walk.*
C. Alæ anticæ albido murinæ. - - - - saucia, *Boisd.*

5. CYCNIA PUNCTIVAGA.

Fœm. *Fusco-testacea; palpi lutei, apice fusci; alæ obscure fuscæ, anticæ nigro vittatæ, basi venisque testaceis, posticæ venis supra fuscis, subtus testaceis.*

Female. Brownish testaceous. Proboscis testaceous. Palpi luteous, with dark brown tips. Wings dark brown. Fore wings testaceous towards the base; veins testaceous, strongly marked;

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* CYCNIA BUDEA.

Cycnia Budea, *Hübn. Verz. Schmett.* 184, 1903.

CYCNIA TENERA.

Cycnia Tenera, *Hübn. Verz. Schmett.* 184, 1904.

five black spots towards the base, three at the tip and in front of the discal areolet, and an undulating band of black dots extending from the first superior vein to the hind border. Hind wings as dark as the fore wings, their veins dark brown above, testaceous beneath. Length of the body 5 lines; of the wings 14 lines.

a. Java. From the East India Company's collection.

6. Cycnia testacea.

Testacea; abdomen apice subtus luteum; alæ anticæ nigro quadrisignatæ.

Testaceous. Palpi and legs of the same colour. Abdomen luteous towards the tip beneath. Fore wings with two blackish marks adjoining the discal areolet, the first between the fourth and third inferior veins, the second between the third and second inferior veins; two contiguous blackish marks in front of half the length of the discal fold beyond the discal areolet. Length of the body 6 lines; of the wings 14 lines.

a. North India. From Mr. Stevens' collection.

7. Cycnia? saucia.

Thorax murinus, punctis nigris; abdomen albido-cinereum, basi anoque supra rubellis; alæ anticæ albido-murinæ subdiaphanæ, costa macula media apiceque fuscis; posticæ albido-submurinæ subdiaphanæ; pedes rubri.

Chelonia saucia, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 214, 3.

New Guinea.

Genus 31. ALPHÆA.

Mas. Corpus mediocriter validum. Proboscis brevis. Palpi sat robusti, mediocriter longi; articulus 2us 1o valde longior; 3us conicus, minimus. Antennæ subpectinatæ. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus duobus posticis mediocriter longis. Alæ latæ.

Male. Body moderately stout. Proboscis short. Palpi hairy, rather stout, moderately long; second joint very much longer than the first; third conical, very small. Antennæ minutely pectinated. Abdomen hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with two moderately long apical spurs. Wings

broad. Fore wings rather narrower than the hind wings; first, second and third inferior veins almost contiguous at the base; fourth very remote.

1. ALPHÆA FULVO-HIRTA.

Mas. *Alba; caput antice nigrum; thorax maculis duabus anticis nigro-fuscis vittisque duabus nigris; abdomen supra fulvum, subtus e maculis fuscis trivittatum; pedes fusci, albo varii, femoribus anticis luteo vittatis; alæ anticæ fuscæ, albo maculatæ; posticæ fusco maculatæ.*

Male. White. Head black in front. Proboscis testaceous. Palpi and antennæ black. Thorax with testaceous hairs about the sutures and in front, with two elongated blackish brown spots in front, and with a black stripe on each side. Pectus thickly clothed with brown hairs. Abdomen above thickly clothed with tawny hairs; under side with three rows of brown spots. Legs brown; fore femora with a luteous stripe; fore tibiæ and fore tarsi with white dots beneath; middle femora with a white band. Fore wings brown, with numerous white spots, of which the largest are along the hind border, the most elongated along the fore border, and the smallest in the disk, where one of them is very slender and nearly rectangular. Hind wings with one discal and a few marginal and submarginal brown spots and dots. Length of the body 8 lines; of the wings 23 lines.

a. ———? From Mr. Stevens' collection.

Genus 32. AMPHISSA.

Mas. Corpus lineare, cylindricum, mediocriter longum et validum. Proboscis brevis. Palpi brevissimi; articulus 2us 1o longior; 3us minimus, acuminatus. Antennæ graciles, simplices. Thorax pilis adpressis. Abdomen alas paullo superans. Pedes graciles; tibiæ posticæ calcaribus parvis apicalibus. Alæ sat angustæ.

Male. Body linear, cylindrical, moderately long and stout. Proboscis short. Palpi very short; second joint longer than the first; third very minute, acuminated. Antennæ slender, simple. Thorax smooth, with flat-lying hairs. Abdomen extending for one-fourth of its length beyond the hind wings; anal appendages slender, curved. Legs slender; hind tibiæ with small apical spurs. Wings rather narrow. Fore wings straight in front; first inferior vein almost contiguous to the second; second and third united, and forming a very short petiole; fourth remote. Hind wings hardly convex in front.

1. AMPHISSA VACILLANS.

Alba; palpi apice nigri; antennæ nigræ; abdomen supra luteum, e maculis nigris trivittatum, subtus pallide cinereo-fuscum vittis duabus macularibus nigris; pedes fuscescentes, femoribus anticis supra luteis apice nigris; alæ pallide cinereo-fuscæ, anticæ basi et apud costam albidæ, posticæ fusco marginatæ.

White. Proboscis testaceous. Palpi with black tips. Antennæ black. Abdomen above luteous, with three rows of black spots; under side pale grayish brown, with a row of black spots along each side. Legs brownish; fore femora luteous above with black tips. Wings pale grayish brown. Fore wings whitish towards the base and along the costa. Hind wings brown along the inner border and the outer border. Length of the body 6 lines; of the wings 15 lines.

a. Hong Kong. From Mr. Harrington's collection.

Genus 33. LACYDES.

Corpus sat crassum. Proboscis brevis. Palpi longi, porrecti, graciles; articulus 2us 1o valde longior; 3us gracilis, 2i dimidio vix brevior. Tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ. *Mas.*—Antennæ mediocriter pectinatæ. Abdomen alas posticas vix superans. *Fœm.*—Antennæ serratæ. Abdomen alas posticas distincte superans.

Body rather stout. Proboscis short. Palpi long, porrect, slender, extending beyond the head; second joint very much longer than the first; third nearly half the length of the second, slender, sublanceolate. Hind tibiæ with four small spurs. Wings of moderate breadth. Fore wings a little narrower than the hind wings; first and second inferior veins almost contiguous at the base, third about thrice further from the fourth than from the second. *Male.*—Antennæ moderately pectinated. Abdomen hardly extending beyond the hind wings. *Female.*—Antennæ serrated. Abdomen extending to some length beyond the hind wings.

1. LACYDES INTERCISA.

Alba; palpi ex parte antennæque fusca; abdomen supra fuscum, segmentis luteo fasciatis. Mas.—*Thorax testaceo varius; alæ anticæ fasciis quatuor obliquis cervinis macularibus, posticæ maculis guttisque marginalibus cervinis.* Fœm.—*Thorax fusco varius; alæ fusco fasciatæ et notatæ.*

Bombyx (Eyprepia) intercisa, *Freyer, Neuere Beitr. Schmett.* iv. 118, pl. 356. *Ent. Zeit. Stett.* ii. 90.
Chelonia intercissa, *Eversm. Faun. Lep. Volg. Ural.*
Chelonia spectabilis, *Tausch. Herr.-Schæff. Samml. Eur. Schmett.* ii. *Text, Suppl.* 145, 16, 2.

White. Palpi partly brown. Antennæ brown. Abdomen above brown, with a luteous band on the hind border of each segment. Tarsi slightly brownish beneath. *Male.*—Head partly testaceous above. Thorax testaceous in front and on each side. Fore wings with four oblique fawn-coloured macular bands. Hind wings with four submarginal fawn-coloured spots, and a row of marginal dots of the same colour. *Female.*—Head partly brown above. Thorax brown in front and on each side. Fore wings with four oblique brown macular bands, more irregular than those of the male. Hind wings with a brown irregular partly macular brown submarginal band; disk slightly streaked with brown; border with brown dots. Length of the body 4½—5 lines; of the wings 14—16 lines.

South Russia. Sarepta.

a, b. Europe. From M. Becker's collection.

Genus 34. ALPENUS.

Mas. Corpus sat gracile. Proboscis brevis. Palpi porrecti, mediocriter longi; articulus 2us 1o multo brevior; 3us conicus, 2i dimidio multo brevior. Antennæ serratæ. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ sat latæ.

Male. Body rather slender. Proboscis short. Palpi moderately long, porrect; second joint much longer than the first; third conical, much less than half the length of the second. Antennæ serrated. Abdomen extending for one-fourth of its length beyond the hind wings. Legs moderately slender; hind tibiæ with four small spurs. Wings moderately broad. Fore wings nearly as broad as the hind wings; first, second and third inferior veins nearly contiguous at the base; fourth remote.

1. ALPENUS ÆQUALIS.

Fœm. *Albus; palpi supra nigri; antennæ nigræ; thorax nigro sexguttatus; abdomen supra luteum, e guttis nigris trivittatum; tibiæ tarsique nigra, albo fasciata; alæ anticæ guttis plurimis nigris; posticæ gutta discali maculisque nonnullis submarginalibus nigris.*

Fem. White. Palpi black, white beneath. Antennæ black, white at the base. Thorax with three black dots on each side, four in front and two in the middle. Abdomen luteous above, with three rows of black dots; under side with two rows of black dots. Tibiæ and tarsi black, with white bands. Fore wings with numerous black dots of various size and shape, nearly equally disposed over the surface. Hind wings with a black discal dot, and with a few submarginal black spots. Length of the body 7 lines; of the wings 22 lines.

a. West Africa. From Mr. Stevens' collection.

Genus 35. ANTHEUA.

Mas. Corpus longum, robustum. Oculi magni. Proboscis capitis latitudine æqualis. Palpi breviusculi, oblique ascendentes; articulus 2us 1o multo longior; 3us minutus, acuto-conicus. Antennæ mediocriter pectinatæ, apice serratæ, corporis triente vix breviores. Abdomen alas posticas triente superans. Pedes validi, breviusculi, late ciliati; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ non longæ.

Male. Body long, stout. Eyes large. Proboscis full as long as the breadth of the head. Palpi obliquely ascending, rather short; second joint much longer than the first; third minute, acute-conical. Antennæ nearly one-third of the length of the body, moderately pectinated; the branches ceasing towards the tips, where the antennæ are serrated. Abdomen extending for rather more than one-third of its length beyond the hind wings. Legs stout, rather short, deeply ciliated; hind tibiæ with four rather long spurs. Wings rather broad, not long. Fore wings straight along the costa; three inferior veins; first and second near together at the base; third remote.

This genus seems to connect the *Arctiidæ* with the *Noctuites*.

1. ANTHEUA SIMPLEX.

Pallide testacea; caput et thorax luteo fasciata; abdomen supra nigricans, basi et apice testaceum, maculis lateralibus ochraceis; alæ albidæ, anticæ nitentes sericeæ strigis pallidissime fuscis.

Male. Pale testaceous. Head and thorax with slight pale luteous bands. Abdomen blackish above, except at the base and at the tip, with a row of orange spots along each side. Wings whitish.

Fore wings shining, silky, with very pale brown streaks between the veins. Length of the body 12 lines; of the wings 22 lines.

a. Port Natal. From M. Gueinzius' collection.
b. Cape. From M. Becker's collection.

2. ANTHEUA TRICOLOR.

Mas. *Flava; abdomen luteum, maculis lateralibus nigris; alæ anticæ macula discali atomaria fusca, subtus posticæque cinereæ.*

Male. Yellow. Head in front and about the base of the antennæ luteous. Palpi, pectus and legs brown. Antennæ tawny. Abdomen luteous, with a stripe of black spots along each side; under side cinereous. Fore wings with a discal spot composed of brown flecks; under side cinereous. Hind wings dark cinereous, rather paler beneath. Length of the body 9 lines; of the wings 20 lines.

a. Port Natal. From M. Gueinzius' collection.

Genus 36. ECPANTHERIA.

Corpus robustum. Proboscis mediocriter longa. Palpi brevissimi; articulus 3us acuminatus, minimus. Abdomen alas superans. Pedes validi; tibiæ posticæ calcaribus minutis apicalibus. Alæ mediocriter latæ; anticæ posticas longe superantes.

Mas. Antennæ serratæ. Alæ posticæ sæpissime breves nonnunquam subcaudatæ. *Fœm.*—Antennæ simplicis, non serratæ.

Ecpantheria, *Hübn. Verz. Schmett.* 183.
Phalæna Bombyx, p., *Cram.; Stoll.*
Bombyx, p., *Fabr.*

Body stout. Proboscis moderately long. Palpi very short; third joint acuminated, very small. Abdomen extending more or less beyond the hind wings. Legs stout; hind tibiæ with minute apical spurs. Wings moderately broad. Fore wings very much longer than the hind wings; second inferior vein about twice further from the third than from the first; fourth more than four times further from the third than the third is from the second.

Male. Antennæ serrated. Hind wings generally short; the interior angle dilated in some species, and forming a short tail. *Fem.*—Antennæ simple, not serrated.

North America.

1. Ecpantheria Scribonia.

Alba, thorax et alæ anticæ ocellis plurimis nigris; abdomen cyaneum, vittis tribus macularibus luteis; alæ posticæ maculis nonnunquam marginalibus nigris.

Phalæna Scribonia, *Stoll. Suppl. Cram. Pap. Exot.* v. 177, pl. 41, f. 3.

Bombyx ocularia, *Fabr. Ent. Syst.* iii. 1, 425, 59.

Ecpantheria Scribonia, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, ix. *Hypercompæ, B. Pallidæ*, i. f. 1—4. *Verz. Schmett.* (*Phalænæ Veræ Hypercompæ Pallidæ*), 183, 1835.

Phalæna oculatissima, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 137, 69.

Hind wings of the male slightly caudate.

New York. Cayenne. Surinam.

The ringlets on the thorax and on the fore wings vary in size, number and shape; their borders are in some specimens thickened, and in others occupy the whole surface and convert the ringlets to spots. The spots of the hind wings also vary in size and number, and are fewer in the male than in the female. In the former sex the inner angle forms a short tail, in the latter it is hardly dilated.

a. North America. Presented by Major-Gen. Hardwicke.
b, *c*. Georgia. From Mr. Milne's collection.
d. ———?

Mexico.

A. Thorax albus.
  A. Thorax ocellis plurimis fuscis. - - caudata, *Walk.*
  B. Thorax nigro-cyaneo decem maculatus. - extrema, *Walk.*
B. Thorax cinereus. - - - - - - incarnata, *Walk.*

2. Ecpantheria caudata.

Mas. *Alba; caput antice cyaneum, macula alba; antennæ obscure cyaneæ; thorax ocellis plurimis fuscis; abdomen rufum, segmentis dorsalibus cyaneo interrupte fasciatis; tarsi subtus cyanei; albæ anticæ fasciis quinque aut sex obliquis ocellaribus fuscis; posticæ subcaudatæ.*

Male. White. Head dark blue in front, excepting a white spot on the face. Antennæ dark blue. Thorax with numerous

brown ringlets, some of which are tinged with pale metallic blue or green. Abdomen red, clothed with testaceous hairs at the base; dorsal segments with broad blue bands, which are partly interrupted in the middle, and wholly interrupted on each side. Knees and tarsi beneath metallic blue. Fore wings with five or six oblique bands of small separate brown ringlets; those along the costa are larger and with broader borders, and nearly subquadrate. Hind wings with the inner angle prolonged into a short tail. Length of the body 9 lines; of the wings 25 lines.

This species much resembles *E. cyaneipes*, but the spots on the thorax are very different, and the tails of the hind wings are longer and without black spots.

a. Mexico. Presented by E. Doubleday, Esq.

3. ECPANTHERIA INCARNATA.

Cinerea; caput fascia arcuata alba-nigro marginata, palpi rufi, subtus albi; antennæ nigræ; thorax vittis quinque nigris duabusque albis; pectus album; abdomen cyaneum, rufo bivittatum, subtus testaceum nigro vittatum; femora vittis rufis nigro marginatis; tibiæ albo vittatæ; tarsi rufo fasciati; alæ anticæ strigis variis irregularibus albis nigro marginatis; posticæ basi rufæ fasciisque duabus coccineis macularibus obliquis.

Gray. Head with a curved white black-bordered band in front of the antennæ, and with a black border on each side, behind, and towards the mouth. Proboscis pale testaceous. Palpi red, white beneath. Antennæ black, white at the base. Thorax with five slender black stripes, the middle one and the inner pair abbreviated in front, accompanied with some white and red hairs behind; a white stripe on each side widening from the head to the fore wings. Pectus mostly white. Abdomen dark blue, with a red stripe on each side; under side testaceous, with a black stripe. Femora with red black-bordered stripes; tibiæ with white stripes; tarsi with red bands. Fore wings with various irregular white black-bordered streaks, which are broadest and most oblique along the costa, where the black hind border of them is dilated, and forms a discal mark; these streaks are mostly red on the under side. Hind wings red at the base and with two crimson macular oblique bands, which on the under side towards the costa are white with black borders. Length of the body 7¼ lines; of the wings 20 lines.

a. Mexico. Presented by E. Doubleday, Esq.

4. ECPANTHERIA EXTREMA.

Alba; caput antice nigro-cyaneum; antennæ nigræ; thorax nigro-cyaneo decem maculatus; pectus nigro-fuscum; abdomen nigro-cyaneum, testaceo bivittatum, subtus album, maculis nigris trivittatum; pedes nigro-cyanei, strigis maculisque albis; alæ anticæ fasciis duabus obliquis interruptis guttisque strigisque obscure fuscis. Mas.—*Alæ posticæ cinereo-fuscæ.* Fœm.—*Alæ posticæ albæ.*

White. Head bluish black in front. Antennæ black, tinged with blue at the base. Thorax with ten bluish black spots, two in front, two behind, and each three of the other six forming two intermediate bands. Pectus blackish brown. Abdomen bluish black, with a testaceous stripe on each side; under side white, with three rows of black spots. Legs bluish black, with white streaks and spots. Fore wings with two oblique more or less interrupted dark brown bands; the intermediate spaces with various dark brown spots, dots and streaks. *Male.*—Hind wings grayish brown, with two white spots, one costal, the other discal; cilia partly white. *Female.*—Hind wings white, with a few grayish brown submarginal spots and marginal dots.

Var. β. Male. Hind wings white; disk grayish brown towards the base; submarginal band and marginal dots grayish brown. Length of the body 6—8 lines; of the wings 14—24 lines.

a, b. Mexico. Presented by E. Doubleday, Esq.
c, d. Mexico. From M. Becker's collection.

West Indies.

A. Thorax totus albus. - - - - obliterata, *Walk.*
B. Thorax maculis ocellaribus.
A. Abdomen cyaneum, coccineo fasciatum. - nigriplaga, *Walk.*
B. Abdomen ochraceum, maculis lateralibus cyaneis.
a. Alæ posticæ *maris* vix caudata. - - simplex, *Walk.*
b. Alæ posticæ *maris* caudis longiusculis. - decora, *Walk.*

5. ECPANTHERIA OBLITERATA.

Alba, valida; antennæ subtus nigræ; abdomen supra luteum, basi, apice vittisque duabus macularibus albis; femora et tibiæ luteo vittata; alæ anticæ fasciis ocellaribus quatuor obliquis testaceis; posticæ bifasciatæ.

White, stout. Proboscis testaceous. Antennæ black beneath. Abdomen above luteous, with two rows of white spots; base and tip white. Femora and tibiæ with luteous stripes; ungues black. Fore wings with four oblique bands of connected testaceous ringlets. Hind wings with three more indistinct bands of the same; their hind borders slightly emarginate and undulating, with the inner angle somewhat dilated. Length of the body 9—10 lines; of the wings 30—32 lines.

a. Nevis. West Indies. Presented by the Entomological Club.
b, c. West Indies? Presented by E. Doubleday, Esq.

6. Ecpantheria nigriplaga.

Alba; antennæ nigræ; thorax ocellis viridi aut cyaneo-nigris; abdomen cyaneum, coccineo fasciatum; tibiæ nigro fasciatæ; tarsi nigri; alæ anticæ maculis albidis viridi-nigro marginatis; posticæ maculis duabus nigris costalibus, postice caudatis nigroque unimaculatis.

White. Proboscis testaceous. Antennæ black. Thorax with greenish or bluish black ringlets. Abdomen dark metallic blue, with crimson bands, clothed with blackish brown hairs at the base; tip with white hairs on each side; under side with tawny hairs at the tip. Tibiæ with black bands; tarsi black, partly white at the base. Fore wings with greenish or bluish black ringlets, whose disks are grayish or dingy white; these are largest on the borders, very small on the disk or towards the tips of the wings. Hind wings with two large black spots on the fore border, hairy, vaulted cylindrically, and each including a tuft along the abdomen, their tails reaching to the tip of the abdomen, and each with a large black elliptical spot. Length of the body 8 lines; of the wings 24 lines.

a. Jamaica. From Mr. Gosse's collection.

7. Ecpantheria simplex.

Mas. *Alba; caput antice et subtus palpique nigro-fusca; antennæ nigro-fuscæ, subpectinatæ; thoracis discus ocellis nigro-fuscis; abdomen supra ochraceum, fasciis basalibus fuscis albisque, lateribus cyaneo maculatis, apice albo; pedes fusci, albo vittati, tarsis fasciis albis; alæ anticæ fasciis sex ocellaribus fuscis.*

Male. White. Head in front and beneath and palpi blackish brown. Proboscis testaceous. Antennæ blackish brown, minutely pectinated, white above. Disk of the thorax with blackish brown ringlets, which vary in size and number. Abdomen orange above,

white at the tip, with brown and white bands at the base, and with a row of blue spots along each side. Legs brown, with white stripes; tarsi with white bands. Fore wings with six oblique bands of pale brown ringlets. Length of the body 7—8 lines; of the wings 20—22 lines.

a, *b*. Nevis. Presented by the Entomological Club.
c, *d*. West Indies? Presented by E. Doubleday, Esq.

Var. β. *Alæ posticæ vitta apud marginem interiorem interrupta nigra.*

Hind wings with a black interrupted stripe near the inner border.

a. Porto Rico. From Mr. Cuming's collection.

8. ECPANTHERIA DECORA.

Mas. *Alba; thorax ocellis novem cyaneis; abdomen luteum, e maculis cyaneis bivittatum; apice album; alæ anticæ ocellis plurimis angulisque costalibus nigris, litura discali cyanea; postice caudis sat longis, vitta apud marginem interiorem interrupta nigra.*

Male. White. Head blue about the eyes; vertex with a black band, which encloses a whitish spot. Palpi and antennæ black. Thorax with nine blue ocelli; two in front, then four in a curved band, and behind them three which form a triangle. Abdomen luteous, blue at the base, and with two rows of transverse blue spots; tip white, with four streaks; the outer pair black; the inner pair blue, united hindward. Legs with black stripes and bands; tarsi blue. Fore wings with numerous black ocelli, which are disposed in six oblique irregular bands; some angular and incomplete ocelli along the costa, and a blue mark on the discal areolet. Hind wings with a black interrupted stripe along the interior border, which terminates in a rather long tail. Length of the body 7 lines; of the wings 20 lines.

a. St. Domingo. From Mr. Tweedie's collection.

South America.

A. Abdomen luteo varium.
A. Thorax albus.

A. Thorax innotatus. - - - - Icasia, *Cram.*
B. Thorax fasciis angulosis fuscis. - - - - Orsa, *Cram.*
C. Thorax maculis fuscis. - - - - læta, *Walk.*
D. Thorax ocellis testaceis aut fuscis. - Cunigunda, *Cram.*
B. Thorax cervinus aut fuscus. - - - indecisa, *Walk.*
B. Abdomen rufo varium. - - - - - obesa, *Walk.*

9. Ecpantheria Cunigunda.

Mas. *Alba; caput supra cyaneum; thorax ocellis fuscis; scutellum cyaneo bimaculatum; abdomen cyaneum, maculis lateralibus luteis, subtus testaceum, e maculis cyaneis trivittatum; pedes cyaneo varii; alæ anticæ maculis subquadratis costalibus testaceis nigro marginatis; posticæ cauda brevi nigro maculata.* Fœm.—*Alba; palpi ex parte fusci; antennæ nigræ; thorax ocellis quatuor testaceis; abdomen supra luteum fuscis tribus versicoloribus; tibiæ ocellis fuscis; tarsi nigricantes; alæ anticæ fasciis sex obliquis ocellaribus testaceis.*

Phalæna Bombyx Cunigunda, *Cram. Pap. Exot.* iv. 104, pl. 344, f. D. E.

Ecpantheria Cunigunda, *Hübn. Verz. Schmett.* 183, 1886.

Surinam.

Male. White. Head metallic-blue in front and about the eyes. Thorax and fore wings with dark brown ringlets, which on the latter form six oblique bands. Scutellum with two blue spots. Abdomen above dark blue, clothed with brown hairs at the base, whitish at the tip, with a row of luteous triangular spots along each side; hind borders of some of the segments partly luteous; under side slightly testaceous, with three rows of blue spots. Femora with a blue spot on each tip; fore femora and fore tibiæ partly blue; tarsi blue. Fore wings with subquadrate slightly testaceous black-bordered costal spots. Hind wings with the inner angle prolonged into a short tail, and having a black spot.

a. Santa Féde. Bogotá. From Mr. Isaacson's collection.

Fem. White. Proboscis testaceous. Palpi partly brown. Antennæ black, white at the base. Thorax with four pairs of testaceous ringlets of different sizes and shapes. Abdomen above luteous, with three blue, purple, green or gray bands; these are more or less dilated and connected on each side, and excavated in the middle, and in one specimen the abdomen is gray above, with three luteous black-bordered stripes. Tibiæ with brown ringlets; tarsi blackish. Fore wings with six oblique bands of connected testaceous brown

ringlets, which are very variable in size and shape, and are in some cases partly confluent, and in one variety those in the fifth are partly shaded with brown; the borders of the costal ringlets, and of a reniform discal ringlet, are darker than the others in the wing. The ringlets are still more variable and irregular in the hind wings, which are occasionally nearly wholly pale brown.

a. Honduras. From Mr. Miller's collection.
b, *c*. Brazil. From M. Becker's collection.
d. Rio Janeiro. From Mr. Stevens' collection.
e. ———?

10. Ecpantheria Icasia.

Mas. *Alba; abdomen hirtum e maculis cyaneis bivittatum; alæ anticæ ocellis costalibus et posticis fasciaque ocellari basim versus fuscis; posticæ apud marginem interiorem fusco bimaculatæ.*

Phalæna Icasia, *Cram. Pap. Exot.* ii. 130, pl. 181, f. E.
Bombyx Lantanæ, *Fabr. Ent. Syst.* iii. 1, 437, 95.
Ecpantheria Lantanæ, *Hübn. Verz. Schmett.* 183.

Surinam.

11. Ecpantheria Orsa.

Mas. *Alba; thorax antice luteo bimaculatus, fasciis duabus angulosis fuscis; abdomen luteum, fasciis cyaneis; alæ anticæ ocellis nigris, vix fasciatæ; posticæ margine interiore nigro.*

Phalæna Orsa, *Cram. Pap. Exot.* ii. 75, pl. 143, f. F.
Ecpantheria Orsa, *Hübn. Verz. Schmett.* 183, 1889.

Surinam.

12. Ecpantheria obesa.

Fœm. *Alba, crassa; caput supra cyaneum; palpi supra nigri; antennæ nigræ; thorax ocellis fuscis, cyaneo bivittatus; abdomen supra rufum, fasciis cyaneis, subtus e maculis nigris trivittatum; pedes nigro-vittati; alæ cæruleo albæ; anticæ e ocellis fuscis fasciatæ; posticæ maculis ocellisque nigricantibus.*

Fem. White, very stout. Head deep blue in front, except towards the mouth. Palpi black above, and at the tips. Antennæ black, metallic-blue towards the base. Thorax with pale brown ringlets, and with an apical tuft of deep blue hairs; disk slightly tinged with sky-blue; a deep blue stripe along each side. Abdomen

above bright red; each segment with a deep blue band, which appears deep black in some aspects; under side with a middle row of transverse black spots, and two lateral rows of black dots. Femora and tibiæ with black stripes; tarsi black, with white bands towards the base. Wings slightly tinged with sky-blue. Fore wings with six oblique bands of pale brown ringlets; the three outer bands much more regular and complete than the three inner bands; a cruciform mark in the third band composed of four ringlets. Hind wings with some blackish spots along the fore border, and with two or three blackish ringlets on the hind border. Length of the body 10 lines; of the wings 18 lines.

a. ——— ?

13. Ecpantheria læta.

Alba; caput supra fuscum; palpi et antennæ nigra; thorax maculis octo cyaneo-fuscis; pectus cyaneo-nigrum, disco albo; abdomen cyaneo-nigrum, vittis lateralibus et segmentorum suturis luteis; pedes cyanei, femoribus subtus albis, tibiis luteo strigatis; alæ anticæ fasciis sex fuscis, tribus interruptis, subtus luteæ. Mas.—*Alæ posticæ caudatæ, testaceo limpidæ, maculis marginalibus fuscis.* Fœm.—*Alæ posticæ cyaneo-nigræ, antice luteo fasciatæ, intus vitta lutea, postice luteæ maculis nigris.*

Head and thorax white. Head in front brown, and tinged with blue. Proboscis pale testaceous. Palpi black. Antennæ black, tinged with blue towards the base. Thorax with eight blue-brown spots, two in front, four elongated lengthwise, and forming a band on the disk, and two behind. Pectus bluish black, with a white disk. Abdomen bluish black; sutures of the segments and a stripe on each side luteous. Legs dark blue; femora white beneath, and with a white streak near the tips above; tibiæ with luteous streaks. Fore wings white, with three oblique bands, which are interrupted by the white or luteous veins, and are accompanied by three slender irregular and more interrupted bands; under side mostly luteous. *Male.*—Spots on the thorax much darker than those of the female. Bands and stripes of the abdomen broader. Bands of the fore wings blackish brown, tinged with blue. Hind wings mostly bare and limpid, testaceous, with brown spots along the fore border, thickly clothed with testaceous and brown hairs along the inner border, where they are half folded and prolonged into a short tail. *Female.*—Bands of the fore wings olive-brown. Hind wings black, tinged with blue, with short luteous bands along

the fore border; hind border luteous, with black spots; inner border with a luteous stripe. Length of the body 9—10 lines; of the wings 22—28 lines.

a—d. Venezuela. From Mr. Dyson's collection.

14. Ecpantheria indecisa.

Cervina (mas.) *aut fusca* (fœm.); *antennæ nigræ; thorax nigro vittatus; abdomen supra cyaneo-fuscum, vittis tribus luteis nigro marginatis; alæ anticæ fasciis sex obliquis ocellaribus nigris.* Mas.—*Pectus et abdomen subtus testacea; alæ posticæ pallide testaceæ, maculis marginalibus fuscis.* Fœm.—*Pectus cinereo-album; abdomen subtus album, fasciis apicalibus fuscis nigro marginatis; alæ posticæ fuscæ fasciis anticis abbreviatis albis nigro marginatis.*

Head brown in front. Antennæ black. Thorax with slender black stripes, some of which are united in front and behind. Abdomen brown above, with a blue tinge, and with three entire or interrupted luteous black-bordered stripes, the middle one more or less abbreviated. Fore wings with six oblique bands of black ringlets. *Male.*—Thorax and fore wings fawn-colour; their stripes and spots with testaceous borders. Pectus and under side of the abdomen testaceous. Hind wings pale testaceous, bordered with a few brown spots, which vary in size and number. Legs testaceous, with black bands. *Female.*—Thorax and fore wings pale brown; their stripes and spots with whitish borders. Pectus grayish white. Abdomen beneath white, with short brown black-bordered bands at the tips. Legs grayish white, with brown black-bordered bands. Hind wings dark brown, with short white black-bordered bands along the fore border; tips and hind borders white, with a few brown black-bordered spots. Length of the body 6—8 lines; of the wings 16—22 lines.

a—d. South America. Presented by C. Darwin, Esq.
e. ——— ? From Mr. Milne's collection.

Africa.

The following species has some resemblance to *E. indecisa*, but hardly belongs to this genus.

15. Ecpantheria indeterminata.

Testaceo-albida; palpi nigri, subtus albi; antennæ nigræ; abdomen testaceum, subtus albidum; pedes nigricantes, subtus

albido, tarsis nigro fasciatis. Mas.—*Thorax nigro quadriguttatus. Abdomen e maculis fuscis trivittatum; alæ anticæ maculis et ocellis plurimis nigricantibus, posticæ maculis perpaucis marginalibus nigricantibus.* Fœm.—*Thorax ocellis duabus nigricantibus; abdomen fusco fasciatum; alæ anticæ ocellis plurimis fuscis, posticæ maculis paucis fuscis.*

Male and fem. Whitish, with a slight testaceous tinge. Palpi black, white beneath. Antennæ black, white at the base. Abdomen testaceous; under side whitish. Legs blackish, mostly white beneath; tarsi with white bands. *Male.*—Head with a blackish dot behind. Antennæ minutely pectinated. Thorax with four small black spots. Abdomen with three rows of brown spots. Fore wings with numerous blackish spots or ringlets. Hind wings with very few submarginal or marginal blackish spots or dots. *Female.*—Head behind with a blackish ringlet. Thorax with two blackish ringlets. Abdomen with brown bands. Fore wings with numerous brown ringlets. Hind wings with a few brown spots. Length of the body 6—6½ lines; of the wings 18—20 lines.

a. Ashanti. From the Wesleyan Missionary Society's collection.
b. ———?

Country unknown.

The next species is nearly allied to *E. indecisa*, and is probably a native of South America.

16. Ecpantheria degenera.

Fusca. Pallide fusca; palpi nigri, subtus albi; antennæ nigræ; thorax vittis quatuor nigris albido marginatis; abdomen nigro fasciatum, vitta media albida duabusque aurantiacis, subtus album fascia apicali nigra; pedes albi fasciis fuscis nigro marginatis; alæ anticæ fasciis sex obliquis fuscis nigro albidoque marginatis; posticæ albæ.

Pale brown. Head in front blackish brown, with a paler disk. Palpi black, white beneath. Antennæ black, whitish above, white at the base. Thorax on each side with two black whitish-bordered stripes, which are united in front and behind. Pectus mostly white. Abdomen dark brown, with black bands, and with three black-bordered stripes, the middle one whitish, the other two orange; under side white, with a short black band at the tips. Legs white, with brown black-bordered bands. Fore wings with six oblique bands of brown black-bordered spots, whose black borders are

encircled with whitish borders. Hind wings white. Length of the body 6 lines; of the wings 18 lines.

a. ———? From Mr. Milne's collection.
b. ———?

Genus 37. ALOA.

Mas et fœm. Corpus sat validum. Proboscis mediocriter longa. Palpi breves, validi, porrecti; articulus 2us 1o valde longior; 3us conicus, minimus. Antennæ breves, simplices, subsetosæ. Thorax pilis adpressis. Abdomen alas posticas paullo superans. Pedes mediocriter longi et validi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ longiusculæ, non latæ.

Body rather stout. Proboscis moderately long. Palpi short, stout, porrect; second joint very much longer than the first; third conical, very minute. Antennæ simple in both sexes, minutely setose beneath, not more than one-fourth of the length of the body. Thorax smooth, with flat-lying hairs. Abdomen extending a little beyond the hind wings. Legs moderately long and stout; hind tibiæ with two minute apical spurs. Wings rather long, not broad. Fore wings with the first and inferior veins almost contiguous at the base; third about eight times further from the fourth than from the second.

Africa.

A. Alæ anticæ albæ, fusco venosæ. - - - simplex, *Walk.*
B. Alæ anticæ testaceæ maculis fasciaque fuscis, guttisque marginalibus nigris. - - - - - - bifurca, *Walk.*
C. Alæ anticæ roseo-albæ, nigro strigatæ et unifasciatæ. delineata, *Walk.*
D. Alæ anticæ fuscæ, albo variæ. - - marginalis, *Walk.*

1. Aloa simplex.

Alba; caput flavo-fasciatum; palpi lutei, apice nigri; antennæ nigræ; abdomen supra luteum, e maculis nigris trivittatum; femora supra lutea; tibiæ supra tarsique nigra; alæ anticæ fusco venosæ.

White. Head with a yellow band behind. Proboscis tawny. Palpi luteous, black above and at the tips. Antennæ black. Abdomen luteous above, with three rows of black spots. Legs white; femora luteous above; knees and tibiæ above, and tarsi black.

Wings white. Fore wings with brown veins. Length of the body 6—7 lines; of the wings 17—18 lines.

a. Caffraria. From M. Becker's collection.
b—d. Port Natal. From M. Gueinzius' collection.

2. Aloa bifurca.

Testacea; palpi supra nigri; antennæ nigræ; thorax nigro octomaculatus; abdomen e maculis nigris trivittatum; pedes nigro-fusci, femoribus subtus albis; alæ anticæ maculis nonnullis fasciaque obliqua furcata fuscis guttisque marginalibus nigris; posticæ guttis marginalibus unaque discali fuscis.

Testaceous. Palpi black above. Antennæ black, slightly pectinated. Thorax with two black spots in front, a black spot on each side of the middle, and two more at the base of each fore wing. Abdomen with three rows of black spots. Legs blackish brown; coxæ partly luteous; femora white beneath. Fore wings with a brown spot in front and another behind near the base; in the middle an oblique brown band, which is dilated and forked in front and behind, where it is accompanied by a brown dot; a brown spot on the fore border near the tip and some black marginal dots. Hind wings with a brown discal dot and a row of brown marginal dots. Length of the body 6 lines; of the wings 16 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

3. Aloa delineata.

Alba; caput rufo fasciatum; palpi rufi, apice nigri; antennæ nigræ; thorax flavo bivittatus, nigro biguttatus; abdomen supra rufum, fasciis dorsalibus guttisque lateralibus nigris; pedes supra flavi, femoribus anticis supra rufis, tibiis et tarsorum articulis apice nigris; alæ anticæ sæpissime roseo-albæ, nigro strigatæ et unifasciatæ; posticæ flavæ, maculis posticis unaque discali nigris.

White. Head with a very slight red band along the hind border; under side mostly red. Proboscis red. Palpi white beneath near their tips, which are black. Antennæ black. Thorax with two pale yellow dorsal stripes, and with a black dot on each side. Abdomen above red, with a dorsal row of short black bands, and with a row of black dots along each side. Legs yellow above; fore femora red above; tips of the tibiæ and of the joints of the tarsi black. Fore wings above with a slight yellow tinge, their disks with a slight rosy tinge, adorned with some black streaks, which

occupy more than half the length from the base, and are succeeded by an undulating slender black band; under side bright red along most of the length of the costa, and especially so towards the base, with a black spot near the fore border at much beyond half the length. Hind wings yellow, with a black discal spot, and with several black spots of various size near the hind border. Length of the body 9—12 lines; of the wings 24—32 lines.

Var. β. Fore wings without a black band near the hind border. Hind wings with only two black spots.

Var. γ like *var.* β. Fore wings without a rosy tinge. Hind wings with no black spots near the hind border.

Var. δ. Fore wings wholly white, with the exception of a few black dots towards the base. Abdomen wholly red above, with the exception of one or two black dots.

a. Cape. From M. Dregé's collection.
b—e. South Africa. Presented by Dr. A. Smith.
f. South Africa. From Mr. Argent's collection.
g. Port Natal. From M. Gueinzius' collection.
h. ——— ?

4. Aloa marginalis.

Albus; palpi et antennæ nigra; thorax fascia lutea guttisque sex nigris; abdomen supra luteum, e guttis nigris trivittatum; pedes nigri, luteo-alboque fasciati; alæ anticæ maculis marginalibus albis; posticæ maculis submarginalibus fuscis.

White. Proboscis testaceous. Palpi and antennæ black. Thorax with a slender luteous band a little in front of the fore wings, and in front of it a brown mark, with a black dot on each side; two larger black dots near the base of each fore wing. Abdomen above luteous, with three rows of black dots; under side with two rows of black dots. Legs black; coxæ luteous, with a brown spot; femora with a luteous band; hind femora, tibiæ and tarsi with white bands. Fore wings brown, with large marginal white spots, which are smallest at the base and at the tips, and are accompanied by a few submarginal spots. Hind wings with a few large submarginal brown spots. Length of the body 6 lines; of the wings 18 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Asia.

A. Alæ anticæ albæ.
A. Alæ anticæ ad costam rufæ.

A. Alæ anticæ non vittatæ.
  a. Alæ posticæ maculatæ. - - - Lactinea, *Cram.*
  b. Alæ posticæ non maculatæ. - - candidula, *Walk.*
B. Alæ anticæ vitta discali. - - marginata, *Donov.*
C. Alæ anticæ gutta discali fasciaque subapicali nigris. diminuta, *Walk.*
B. Alæ anticæ rufo-albæ. - - - - bifrons, *Walk.*
C. Alæ anticæ pallide cervinæ. - - - isabellina, *Walk.*
D. Alæ anticæ fuscæ.
  A. Alæ anticæ vitta discali maculisque tribus fasciaque albis. tripartita, *Walk.*
  B. Alæ anticæ vitta discali alba.
    A. Alæ posticæ rufæ. - - - - biguttata, *Walk.*
    B. Alæ posticæ albæ. - - - - integra, *Walk.*

5. Aloa Lactinea.

Alba; caput coccineum, albo varium; palpi coccinei, apice nigri; antennæ nigræ; thorax coccineo fasciatus; abdomen supra luteum, fasciis dorsalibus vittisque lateralibus nigris, subtus e guttis nigris bivittatum; femora supra coccinea; tibiæ tarsique supra nigra, articulis apice albis; alæ anticæ ad costam coccineæ.

Phalæna Lactinea, *Cram. Pap. Exot.* ii. 58, pl. 133, f. D.
Bombyx sanguinolenta, *Fabr. Ent. Syst.* iii. 1, 473, 206.
Estigmene Lactinea, *Hübn. Verz. Schmett.* 184, 1894.
Batavia.

Var. *Albo; caput coccineum, antice album; palpi coccinei, apice nigri; antennæ nigræ; abdomen supra coccineum fasciis dorsalibus guttisque lateralibus nigris; femora supra coccinea, apice nigra; tibiæ tarsique supra nigra; alæ anticæ ad costam coccineæ, nigro triguttatæ; posticæ maculis quatuor posticis unaque antica nigris.*

General character. White. Head crimson, with a white dot on the vertex, and a white spot in front. Proboscis tawny. Palpi crimson, with black tips. Antennæ black. Hind border of the prothorax crimson. Abdomen above luteous, with a black stripe along each side, and with a black band on each segment, white at the base; under side with two rows of black dots. Femora crimson above; tibiæ and tarsi black above, with the exception of the tips of the former, and of the joints of the latter. Fore wings crimson along the costa.

Var. a. Thorax with a white dot on each side. Fore wings with a black dot near the costa, a little beyond the middle.

Var. β like *var. a.* Hind wings with a black spot near the middle of the fore border, and a black dot near the hind border towards the tip of the wing.

Var. γ like *var. β.* Hind wings with three black spots along the hind border.

Var. δ like *var. β.* Hind wings with four black spots along the hind border.

Var. ε like *var. δ.* Hind wings with two black spots near the fore border.

Var. ζ like *var. δ.* Fore wings with two black dots.

Var. η like *var. δ.* Fore wings with four black dots, three in a line across the middle, and one near the base of the hind border.

Var. θ. Abdomen with a red spot above at the base.

Var. ι. Head crimson, white in front. Abdomen above crimson, with a dorsal row of short black bands and two lateral rows of black dots; under side with two rows of black dots. Femora crimson above, with black tips; tibiæ and tarsi black above. Fore wings crimson along the costa, with three minute black dots, one in the disk beyond the middle, the other two near the outer border. Hind wings with four black spots along the hind border, and with one black spot in the middle near the fore border, which is reddish.

Var. κ like *var. ι.* Head nearly wholly white above. Prothorax wholly white. Dots on the fore wings almost obsolete. Hind wings wholly white along the fore border, and with only two black dots on the hind border.

Var. λ. Abdomen crimson, with three rows of black spots. Hind wings with an interrupted marginal black band.

a. Australia. From the Voyage of H.M.S. Rattlesnake.
b, c. North India. From Mr. Stevens' collection.
d, e. East Indies. From Archdeacon Clerk's collection.
f. East Indies. From Mr. Milne's collection.
g. North Bengal. Presented by W. W. Saunders, Esq.
h, i. Java. From the East India Company's collection.
j, k. North India. From Mr. L. James' collection.
l. Nepaul. Presented by Major-Gen. Hardwicke.
m. Ceylon. Presented by R. Templeton, Esq.
n. Bengal.
o. North China. From Mr. Fortune's collection.

6. Aloa marginata.

Mas et fœm. Alba, nitens; caput rufo fasciatum; palpi supra rufi, apice nigri; abdomen rufum, e maculis nigris trivittatum, basi apiceque album; alæ anticæ nigro bivittatæ, costa rufa; posticæ maculis marginalibus unaque discali nigris.

Phalæna marginata, *Donov. Epit. Ins. New Holl.* pl.
Chelonia marginata, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 215, *4*.
East Indies?

Male and female. White, shining. Head with a red hind band. Palpi red, black towards the tips, whitish beneath. Antennæ black. Abdomen bright red, white at the base and at the tip, with a dorsal row of short black bands and with two lateral rows of black dots. Fore wings bright red along the costa, with two black stripes, the fore one forked in front; a few black streaks beyond these stripes. Hind wings with one black discal spot and four black marginal spots. Length of the body 6½—7 lines; of the wings 19—21 lines.

a. Van Dieman's Land. Presented by E. Doubleday, Esq.
b. ——— ? Presented by Major.-Gen. Hardwicke.

7. Aloa candidula.

Candida aut testacea; abdomen guttis nigris vittatum; alæ anticæ nonnunquam guttis paucis nigris.

Var. a. Pure white. Palpi partly red above, with a black mark towards the tips. Antennæ black, with white tomentum, red at the base. Abdomen with two lateral stripes of black dots. Femora red above, with a blackish dot on each tip; fore coxæ red above. Fore wings with a black dot at the tip of the discal areolet between the second and third inferior veins; costa red beneath.

a. Nepaul. Presented by Major-Gen. Hardwicke.

Var. β. Head, thorax and fore wings with a very slight testaceous tinge. Fore wings tawny along the costa, with a brown streak behind the discal areolet, and with three blackish dots, one in the disk at one-fourth of the length, the other two near the interior border. Abdomen above with three rows of black dots.

b. Nepaul. Presented by Major-Gen. Hardwicke.

Var. γ like *var. β*. Fore wings pale reddish testaceous, bright red along the costa, without blackish dots. Hind wings with a brown dot at the tip of the discal areolet. Length of the body 4 lines; of the wings 11 lines.

a. Ceylon. From the Rev. J. Wenham's collection.

8. ALOA DIMINUTA.

Alba ; caput fusco fasciatum ; palpi apice fusco ; antennæ fuscæ ; abdomen supra rufum, e guttis nigris trivittatum ; coxæ et femora supra rufa ; tibiæ tarsique supra fusca ; alæ anticæ ad costam rufescentes, apud venas subtestaceæ, gutta discali fasciaque subapicali nigris ; posticæ gutta discali nigra.

White. Head slightly testaceous, with a brown band behind. Proboscis testaceous. Palpi brown above towards the tips. Antennæ brown, red at the base. Abdomen above red, with three rows of black dots. Coxæ and femora red above ; tibiæ and tarsi brown above. Fore wings slightly testaceous along the veins, slightly red along the costa, with a black dot in the disk beyond the middle and a short black subapical streak. Hind wings with a black discal dot. Length of the body 4 lines ; of the wings 11 lines.

a. North India. From Mr. Stevens' collection.

9. ALOA BIFRONS.

Fœm. *Alba ; caput antice nigrum ; palpi supra rufi, apice nigri ; abdomen supra rufum, basi album, e guttis nigris trivittatum ; pedes rufo-nigroque varii ; alæ guttis paucis nigris, posticæ rufæ.*

Female. White. Head black in front. Palpi bright red, with black tips, white beneath. Antennæ black. Abdomen bright red above, mostly white at the base, with three rows of black dots. Coxæ and femora bright red above, the latter with black tips ; anterior tibiæ and tarsi black above ; hind tarsi black above, with a white band near the base. Wings beneath and hind wings also above bright red. Fore wings with a black subcostal dot, and two or three black dots by the internal border. Hind wings with a black anterior discal dot. Length of the body 7 lines ; of the wings 16 lines.

a. North China. From Mr. Cuming's collection.
b. North China. From Mr. Fortune's collection.

10. ALOA ISABELLINA.

Alba ; palpi lutei, apice nigri ; antennæ nigræ ; thorax cervino-albus ; abdomen luteum e maculis nirgis trivittatum ; pedes lutei, coxis tibiisque nigro vittatis, tarsis nigris ; alæ pallide cervinæ, anticæ guttis quatuor discalibus nigris. Mas.—*Thorax cervino trivittatus ; alæ posticæ cinereo-cervinæ.* Fœm. —*Alæ anticæ gutta subapicali nigra ; posticæ maculis tribus nigris.*

White. Proboscis testaceous. Palpi luteous, with black tips above. Antennæ black. Thorax with a slight tinge of fawn-colour. Abdomen luteous, with three rows of black spots above and below. Legs luteous; knees and tarsi black; coxæ and tibiæ with black stripes. Wings pale fawn-colour. Fore wings with four black dots arranged tetragonally in the disk of the wing. *Male.*—Thorax with three fawn-coloured stripes, the lateral pair abbreviated hindward. Fore wings darker than those of the female. Hind wings grayish fawn-colour, a little darker than the fore wings. *Fem.*—Fore wings with a subapical black dot in a line with the hind pair of the discal dots. Hind wings with three black spots along the hind border, two posterior, one subapical. Length of the body 6—7 lines; of the wings 18—20 lines.

a, *b*. East Indies. From Archdeacon Clerk's collection.
c, *d*. North India. From Mr. Stevens' collection.
e. Silhet. From the Rev. J. Stainforths' collection.
f. Silhet. From Mr. Sowerby's collection.

11. ALOA TRIPARTITA.

Obscure fusca; caput supra pallide flavum, gutta postica nigra; antennæ nigræ; thoracis latera pallide flava; abdomen pallide flavum, fasciis dorsalibus fuscis; alæ anticæ vitta discali maculisque tribus fasciaque obliqua maculari albis; posticæ flavæ, maculis quatuor marginalibus fuscis.

Dark brown. Proboscis testaceous. Head above pale yellow, with a black hind dot. Antennæ black. Thorax pale yellow along each side. Abdomen pale yellow, with a row of short brown dorsal bands, the hinder one subapical, extending across the whole breadth, and connected with a brown subquadrate apical spot. Fore wings with a white discal stripe, which extends from the base to nearly half the length, and is composed of two spots which are connected by a short petiole; the second spot is accompanied in front by a white dot. Beyond the middle of the wing there is an oblique macular white band, which does not extend to the hind border. Hind wings yellow, with four large brown marginal spots, one anterior, one apical, and two posterior; the first and the second connected. Length of the body 5—5½ lines; of the wings 14—16 lines.

Var. β. Dot of the fore wings wanting; third and fourth spots of the hind wings connected in front.

Var. γ. Hindmost band of the abdomen abbreviated like the rest. Fore wings with a white marginal spot beyond the band. Hind wings yellow, with four brown unconnected marginal dots.

Var. δ like *var.* γ. Dot of the fore wings enlarged into a spot; three marginal brown dots beyond the band. Hind wings yellow, with a brown dentate border in front, and with a brown dot behind; some of the veins slightly bordered with brown.

a—c. North India. From Mr. L. James' collection.
d. East Indies. From Archdeacon Clerk's collection.

12. Aloa biguttata.

Obscure fusca; vertex rufo-alba; antennæ nigræ; thorax albus, nigro biguttatus; abdomen supra rufum, e maculis nigris trivittatum; coxæ et femora rufo vittata; alæ anticæ vitta discali alba; posticæ rufæ, maculis quatuor marginalibus fuscis.

Dark brown. Vertex reddish white. Antennæ black, reddish white at the base. Thorax white, and with a black dot on each side. Abdomen bright red above, with three rows of black spots, the middle row forming short bands. Coxæ and femora with red stripes. Fore wings with a white discal stripe, which extends from the base, is slightly curved forward, and ends just in front of the tip. Hind wings red, with four brown marginal spots, one anterior, one apical, and two posterior, the first and the second connected. Length of the body 5½ lines; of the wings 16 lines.

a. Canara, Malabar Coast. Presented by S. N. Ward, Esq.

13. Aloa integra.

Obscure fusca; vertex flavo-alba; antennæ nigræ; thorax albo bivittatus; abdomen supra flavum, fasciis dorsalibus guttisque lateralibus nigris; alæ anticæ vitta discali alba; posticæ albæ, fusco marginatæ et uniguttatæ.

Dark brown. Vertex yellowish white. Proboscis testaceous. Antennæ black. Thorax with a white stripe on each side. Abdomen above yellow, with a row of short black dorsal bands, and with a row of black dots on each side. Fore wings with a white discal stripe, which extends from the base, is slightly curved forward, and ends at the tip of the wing. Hind wings white, with a yellow tinge along the inner border, and with a brown fore border, which is accompanied by a brown dot at a little beyond half the length. Length of the body 5 lines; of the wings 14 lines.

a. Philippine Islands. Presented by J. C. Bowring, Esq.

Country unknown.

A. Alæ anticæ albo vittatæ. - - - - dentata, *Walk.*
B. Alæ anticæ albo fasciatæ. - - - - erosa, *Walk.*

14. ALOA DENTATA.

Fusca; caput supra album; antennæ basi rufæ; thorax supra albus, vitta guttisque duabus fuscis; abdomen supra rufum, e maculis nigris trivittatum; alæ anticæ vitta discali maculisque duabus albis; posticæ rufæ; maculis quinque marginalibus fuscis.

Brown. Head white above, red along the hind border. Antennæ red at the base. Thorax above white, with a brown stripe, which widens hindward, and has a brown dot on each side. Abdomen above red, with three rows of black spots, the middle row forming short bands. Fore wings with a white discal stripe, which is dentate in front at one-third of the length, is curved forward beyond the middle, and joins the costa near the tip of the wing; outer border with two white spots forming an interrupted band. Hind wings red, with five large brown marginal spots, two anterior, one apical, and two posterior; the first, second and third connected. Length of the body 6 lines; of the wings 19 lines.

a. ———? From Mr. Milne's collection.

15. ALOA EROSA.

Fusca; caput supra album maculis duabus fuscis, subtus rufum; palpi subtus rufi; thorax albo marginatus, nigro quadriguttatus; abdomen supra rufum, e maculis nigris trivittatum; femora rufo vittata; alæ anticæ vitta discali fasciaque obliqua connexis rufo-albis; posticæ rufæ, fascia lata marginali rufo trimaculata maculaque discali fuscis.

Brown. Head red beneath and on each side, white above with a brown spot on the hind border. Palpi red beneath. Thorax white in front and on each side; two black dots in front and one on each side. Abdomen above bright red, with three stripes of black spots. Femora with red stripes. Fore wings with a reddish white irregular discal stripe, which extends from the base to half the length, and is much indented on each side; it includes near the body a brown dot, and terminates in an oblique band which extends to each border, but is interrupted in front; on the under side it is red. Hind wings bright red, with a brown discal spot, and with a very broad marginal

brown band, which includes three red marginal spots. Length of the body 7 lines; of the wings 24 lines.

*a. ——— ?

Genus 38. ARDICES.

Corpus mediocriter robustum. Caput et thorax dense hirta. Proboscis capitis latitudine brevior. Palpi breves, validi, porrecti, pilosi; articulus 2us 1o multo longior; 3us conicus, minimus. Abdomen alas posticas non superans. Pedes mediocriter robusti; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latiusculæ. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ subpectinatæ.

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*Genus . MALLOCEPHALA.

Corpus crassum. Caput parvum. Palpi recti, elongati, graciles, pilosi; articulus 3us arcuatus. Antennæ pectinatæ. Abdomen cylindricum, crassiusculum. Alæ oblongæ, integræ.

Malloaphala, *Blanch. Gay, Hist. Chil.*

1. MALLOCEPHALA RUBRIPES.

Fulvo lanosus; palpi femoraque rosea; abdomen supra roseum, linea media nigra; alæ totæ fuliginosæ; posticæ dilutiores.

Malloaphala rubripes, *Blanch. Gay, Hist. Chil. Atlas, Zool. Ent. Lep.* pl. 4, f. 7.

Coquimbo.

Genus . COMPSOPRIUM.

Corpus elongatum, cylindricum. Proboscis gracilis, elongata. Palpi elongati, graciles, parum squamosi; articulus 3us oblongus, acutus. Antennæ elongatæ. Pedes valde elongati. Alæ oblongæ, angustiusculæ.

Compsoprium, *Blanch. Gay, Hist. Chil.*
Ctenucha Group? *Cat. Lepid. Hetero.* Pt. 2.

1. COMPSOPRIUM VITTIGERUM.

Nigro-chalybæum; caput aurantiacum; antennæ nigræ; alæ anticæ nigræ, venulis albido vittatis; posticæ totæ nigro-chalybeæ.

Compsoprium vittigerum, *Blanch. Gay, Hist. Chil.*
Chelonia vittigera, *Blanch. Gay, Hist. Chil. Atlas, Zool. Ent. Lép.* pl. 4, f. 1.

Coquimbo.

Body moderately stout. Head and thorax thickly clothed with hairs. Proboscis shorter than the breadth of the head. Palpi short, stout, porrect, hairy; second joint much longer than the first; third conical, very minute. Abdomen extending as far as the hind wings. Legs moderately stout; hind tibiæ with four rather long spurs. Wings rather broad. Fore wings with the first and second inferior veins contiguous at the base; third about eight times further from the fourth than from the second. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ very minutely pectinated.

Nearly allied to *Arctia* and to *Spilosoma.*

1. ARDICES FULVOHIRTA.

Alba; caput antice nigrum; palpi supra nigri; antennæ nigræ; thorax nigro trivittatus; abdomen e maculis nigris trivittatum, subtus nigro fasciatum; pedes nigri, subtus albi; alæ anticæ fasciis obliquis irregularibus fuscis, postice maculu disculi nonnullisque marginalibus fuscis. Mas.—*Thorax luteo bimaculatus; abdomen luteum.* Fœm.—*Thorax rufo bimaculatus; abdomen rufum.*

White. Head black in front. Proboscis testaceous. Palpi black above. Antennæ black, white at the base. Thorax very thickly clothed with tawny hairs, with three short black stripes, which vary much in breadth. Abdomen with three rows of black spots; underside with black bands. Legs black, white beneath. Fore wings with four or five irregular oblique brown bands, which vary in breadth and outline, and occupy most of the surface, and are partly confluent, though interrupted by the white veins. Hind wings with one discal and several marginal and submarginal brown spots. *Male.*—Palpi thickly clothed beneath with luteous hairs. Thorax with a luteous spot on each side in front. Femora and abdomen luteous above. *Female.*—Thorax with a red spot on each side in front. Femora and abdomen red above. Length of the body 7—8 lines; of the wings 20—23 lines.

a—c. Van Dieman's Land. Presented by Morton Allport, Esq.
d—f. Van Dieman's Land. From Mr. A. J. Smith's collection.
g—k. Van Dieman's Land. Presented by R. Butler, Esq.
l, m. Kangaroo Island. Presented by E. Doubleday, Esq.
n. New Holland. From Mr. Stevens' collection.

Genus 39. NERITOS.

Mas. Corpus gracile. Proboscis longiuscula. Palpi mediocriter longi, oblique adscendentes; articulus 2us 1o multo longior; 3us minimus. Antennæ subpectinatæ, corporis vix breviores. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ, anticæ subtus basi fasciculatæ.

Male. Body slender. Proboscis rather long. Palpi moderately long, obliquely ascending; second joint much longer than the first; third very minute. Antennæ rather slightly pectinated, nearly as long as the body. Abdomen extending for one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings narrow. Fore wings with a tuft beneath in the disk near the base, and with a corresponding convexity above; first and second inferior veins contiguous at the base; third near the second; fourth remote from the third.

1. NERITOS REPANDA.

Pallide fusca; caput testaceum, fusco fasciatum; palpi testacei, subtus albi; abdomen album, disco dorsali rufo; pedes albi; alæ anticæ fascia lata obliqua flavo-albida; posticæ flavo-albidæ.

Pale brown. Head testaceous, with a brown band in front. Palpi and proboscis testaceous, the former white beneath. Antennæ brown, white towards the tips. Abdomen white; disk above pale red. Legs white. Fore wings with a fusiform tubercle in the disk near the base, and with a broad oblique yellowish white band, which is dilated along the border at each end, and extends there to the tip. Hind wings yellowish white. Length of the body 4½ lines; of the wings 12 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus 40. AMELES.

Mas. Corpus lineare, sat robustum. Proboscis longa. Palpi graciles, porrecti, mediocriter longi; articulus 2us 1o multo longior; 3us lanceolatus, gracilis, 2o duplo brevior. Antennæ subpectinatæ, corporis dimidio non longiores. Abdomen apice tumidum, alas posticas triente superans. Pedes robusti; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ angustæ, longiusculæ.

Allied to the *Noctuites*. *Male.*—Body linear, rather stout. Proboscis long. Palpi slender, porrect, moderately long; second joint much longer than the first; third lanceolate, slender, about half the length of the second. Antennæ very minutely pectinated, not more than half the length of the body. Abdomen tumid at the tip, extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings narrow, rather long. Fore wings with the second inferior vein nearly as far from the first as from the third; third full twice further from the fourth than from the second.

AMELES RUBRIPLAGA.

Fœm. *Fusca; vertex et frons albæ; palpi subtus testacei; thoracis discus anticus albus, fusco varius; latera albo vittata; pectus luteum; abdomen supra rufum, disco fusco, triente apicali lutea, ventre testaceo; pedes testacei, tibiis anterioribus albido vittatis, tarsis anterioribus albido fasciatis, tibiis tarsisque posticis fulvis testaceo vittatis; alæ anticæ e maculis albis testaceo marginatis univittatæ; posticæ basi maculisque anticis rufis.*

Fœm. Brown. Vertex and front white. Proboscis ferruginous. Palpi testaceous beneath. Disk of the thorax in front white, intersected by a slender brown line, and in front with a brown dot on each side; a short white stripe along each side. Pectus luteous. Abdomen red above; disk mostly brown; apical third part luteous; under side testaceous. Legs testaceous; anterior tibiæ with whitish stripes; anterior tarsi with whitish bands; hind tibiæ and tarsi tawny, with testaceous stripes and bands. Fore wings with a curved stripe, extending from the base to beyond the middle of the fore border, composed of white testaceous-bordered confluent spots, and enclosing one white and one testaceous spot; a curved band of like colour occupies the tip of the wings, and includes a brown spot. Hind wings red at the base, and with red spots along the fore border. Length of the body 6 lines; of the wings 18 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 41. BARITIUS.

Mas. Corpus cylindricum, longiusculum. Proboscis corporis dimidio brevior. Palpi longiusculi, ascendentes; articulus 2us subarcuatus, 1o multo longior; 3us linearis, 2o. multo gracilior

et ejus triente brevior. Antennæ subpectinatæ, corporis dimidio non breviores. Abdomen alas posticas longe superans. Pedes sat graciles, longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ longæ, angustæ.

Male. Body cylindrical, rather long. Proboscis less than half the length of the body. Palpi rather long, ascending; second joint slightly curved, much longer than the first; third linear, much more slender than the second, and less than one-third of its length. Antennæ minutely pectinated, full half the length of the body. Abdomen extending far beyond the hind wings. Legs rather slender, somewhat long; hind tibiæ with four long spurs. Wings long and narrow. Fore wings straight in front; discal fold distinct; first inferior vein intersecting the discal areolet, further from the second than the second is from the third; third about six times further from the fourth than from the second.

1. Baritius discalis.

Mas. *Pallide luteus, subtus pallide flavus; palpi fusci, extus rufo vittati; antennæ fuscæ; thorax macula antica discali flava-fusco marginata; abdomen supra rufum; tibiæ fusca unifasciatæ; tarsi fasciis fuscis; alæ anticæ fasciis obliquis sex e maculis luteo-flavis ex parte fusco marginatis, fusco trinotatæ; posticæ pallide rufæ, basi costa ciliisque flavis.*

Male. Luteous, pale yellow beneath. Head above pale yellow. Proboscis ferruginous. Palpi brown; each with a red stripe on the outer side. Antennæ brown, whitish testaceous above and at the base. Thorax with a large obconical pale yellow brown-bordered spot occupying the disk in front. Abdomen red above. Tibiæ with a brown band on each; tarsi with brown bands. Fore wings with six oblique bands of yellow luteous-disked partly brown-bordered spots; three brown marks, one at the tip of the discal areolet, one near the tip in front of the first inferior vein, the third large, on the interior angle; ciliæ alternately brown and luteous. Hind wings pale red, yellow in front and towards the base, and with yellow ciliæ. Length of the body 6½ lines; of the wings 20 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus 42. ELYSIUS.

Mas. Corpus longiusculum, cylindricum, sublineare. Proboscis corporis dimidio æqualis. Palpi erecti, longiusculi; articulus 2us pilosus, subarcuatus, 1o fere duplo longior; 3us conicus, mini-

mus. Antennæ mediocriter pectinatæ. Abdomen alas posticas longe superans. Pedes longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ.

Male. Body rather long, cylindrical, nearly linear. Proboscis about half the length of the body. Palpi vertical, rather long; second joint slightly curved, pilose, almost twice the length of the first; third conical, very minute. Antennæ moderately pectinated. Abdomen extending far beyond the hind wings. Legs rather long; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front; discal fold distinct in the discal areolet; first inferior vein curved forward, joining the second at the base; third nearly thrice further from the fourth than from the second. Hind wings with the inferior veins like those of the fore wings in structure.

A. Alæ posticæ bicolores.
  A. Alæ posticæ albidæ, rufo marginatæ. - conspersus, *Walk.*
  B. Alæ posticæ testaceæ, rufo fasciatæ. - Hermia, *Cram.*
  C. Alæ posticæ roseæ, apice testaceæ. - - Ilus, *Cram.*
B. Alæ posticæ unicolores.
  A. Alæ posticæ rufæ.
    A. Alæ anticæ macula limpida. - sanguinolentus, *Cram.*
    B. Alæ anticæ macula nulla limpida. - Crocos, *Cram.*
  B. Alæ posticæ fuscæ. - - - - Dorothea, *Cram.*

1. Elysius conspersus.

Mas. *Flavus, rufo conspersus; palpi rufi apice nigri; antennæ nigræ; thorax fusco bimaculatus; abdomen luteum, nigro fasciatum, basim versus rufo pilosum; pedes fusci, coxis femoribusque rufis; alæ anticæ pallide fuscæ, fusco variæ, maculis quatuor flavis rufo conspersis; posticæ albidæ semihyalinæ, rufo marginatæ.*

Male. Yellow, sprinkled with red. Proboscis piceous. Palpi red, with black tips. Antennæ black, red at the base. Thorax with two brown spots in the disk and a brown dot by each fore wing. Abdomen luteous, with black bands, clothed above with long reddish hairs for more than half the length from the base; under side with a single row of black dots. Legs brown; coxæ and femora red. Fore wings pale brown, minutely mottled with darker brown, adorned with four very large yellow red-sprinkled spots; the first basal including a slender brown band, the second across the discal areolet, the third beyond it, the fourth near the tip, and composed

of three small spots. Hind wings whitish, semihyaline, with reddish borders. Length of the body 8 lines; of the wings 20 lines.

♂. Parà. Presented by Gordon Graham, Esq.

2. Elysius? Crocos.

Fuscus; corpus subtus albidum; thoracis discus rufo-luteus; abdomen roseum; alæ anticæ margine exteriore fasciisque tribus abbreviatis luteis rufo conspersis, maculaque magna discali testacea rufo marginata; posticæ roseæ.

Phalæna Crocos, *Cram. Pap. Exot.* ii. 44, pl. 126, f. E.
Zatrephes Crocas, *Hübn. Verz. Schmett.* 171, 1766.
Surinam.

3. Elysius Hermia.

Mas. *Luteus, rufo conspersus; abdomen rufescens; alæ anticæ olivaceæ, margine exteriore atomisque fuscis, basi fasciisque quatuor plerumque interruptis luteis rufo conspersis; posticæ testaceæ, fascia angusta submarginali rufa.*

Phalæna Hermia, *Cram. Pap. Exot.* ii. 136, pl. 185, f. F.
Zatrephes Hermia, *Hübn. Verz. Schmett.* 171, 1767.
Surinam.

4. Elysius? sanguinolentus.

Incarnatus; alæ anticæ subacuminatæ, macula discali limpida, macula magna postica basali dimidioque apicali subpallidioribus, atomis incarnatis.

Phalæna sanguinolenta, *Cram. Pap. Exot.* iii. 102, pl. 252, f. A.
Zatrephes sanguinolenta, *Hübn. Verz. Schmett.* 171, 1768.
Surinam.

5. Elysius Dorothea.

Fulvus; alæ obscure fuscæ, anticæ macula magna subquadrata postica basim versus fulva fasciis duabus obscurioribus, maculaque parva discali albida luteo marginata.

Phalæna Bombyx Dorothea, *Cram. Pap. Exot.* iv. 228, pl. 397, f. K.
Zatrephes Dorothea, *Hübn. Verz. Schmett.* 171, 1769.
Surinam.

6. Elysius Ilus.

Rufo-cervinus ; alæ anticæ fuscæ, lituris basalibus ut costalibus fasciaque furcata subapicali cervinis rufo punctatis, posticæ roseæ, apice pallide testaceæ.

Phalæna Ilus, *Cram. Pap. Exot.* i. 145, pl. 92, f. E.
Zatrephes Ilus, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*) 171, 1770.

Surinam.

Genus 43. MALABUS.

Mas. Corpus robustum, non longum. Proboscis longiuscula. Palpi validi, ascendentes, mediocriter longi; articulus 2us 1o valde longior; 3us conicus, minimus. Antennæ distincte serratæ, aut subpectinatæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus nullis aut duobus apicalibus minimis. Alæ sat angustæ, non longæ.

Male. Body stout, not long. Proboscis rather long. Palpi stout, ascending, moderately long; second joint very much longer than the first; third conical, very minute. Antennæ strongly serrated or very minutely pectinated. Abdomen extending for one-fourth of its length beyond the hind wings. Legs slender; hind tibiæ with no spurs or with an extremely minute apical pair. Wings rather narrow, not long. Fore wings with the first and second inferior veins contiguous at the base; third about four times further from the fourth than from the second.

1. Malabus incertus.

Rufus ; palpi testacei ; antennæ fuscæ ; abdomen subtus fuscum ; alæ anticæ cervinæ maculis duabus fuscis, subtus rufæ ; posticæ subtus fere albæ.

Pale red. Palpi and proboscis testaceous. Antennæ brown. Abdomen brown beneath. Legs white; fore coxæ red above. Fore wings fawn-colour, with two indistinct brown spots, one by the hind border before the middle, and one by the fore border beyond the middle; under side pale red, fawn-colour along the costa and at the tips. Hind wings nearly white beneath. Length of the body 5 lines; of the wings 12 lines.

a. Parà. Presented by Reginald Graham, Esq.

Genus 44. PARACLES.

Mas. Corpus robustum. Caput et thorax dense hirta. Proboscis brevis. Palpi valde hirti; articulus 3us minimus. Antennæ subpectinatæ, corporis dimidio longiores. Abdomen apicè incrassatum, alas posticas non superans. Pedes validi, hirti; tibiæ posticæ calcaribus quatuor parvis. Alæ anticæ sat angustæ, subtrigonæ; posticæ anticis paullo latiores.

Male. Body stout. Head and thorax very thickly hairy. Proboscis short. Palpi very hairy; third joint very small. Antennæ minutely pectinated, more than half the length of the body. Abdomen rather less thickly clothed than the thorax, not extending beyond the hind wings, very thick about the anus. Fore wings rather narrow, nearly triangular, straight along the costa; outer border oblique and slightly convex; hind angle very obtuse; first, second and third inferior veins near together at the base; fourth about twice further from the third than the third is from the first. Hind wings rather broader than the fore wings and about two-thirds of their length. Legs stout, hairy; hind tibiæ with four small spurs.

1. Paracles contraria.

Mas. *Obscure fusca; antennæ testaceæ; abdomen testaceo bivittatum; alæ anticæ basi costaque subtestaceis; posticæ albæ, cinereo marginatæ.*

Male. Dark brown. Antennæ testaceous. Abdomen with a testaceous stripe on each side; tip testaceous beneath. Fore wings slightly testaceous at the base and with a pale testaceous costa. Hind wings white, with grayish borders, which are broadest in front of the tips; costa pale testaceous beneath. Length of the body 5 lines; of the wings 14 lines.

a. Parà. Presented by Gordon Graham, Esq.
b. Parà. Presented by J. P. G. Smith, Esq.

Genus 45. BITURIX.

Group. 1.

Corpus sat gracile. Proboscis mediocriter longa. Palpi breves, graciles, porrecti; articulus 2us lo multo longior; 3us parvus, conicus, acuminatus. Abdomen alas posticas dimidio superans.

Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor minutis. Alæ longiusculæ, sat angustæ. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ simplices.

Body rather slender. Proboscis moderately long. Palpi short, slender, porrect; second joint much longer than the first; third small, conical, acuminated. Legs rather long and slender; hind tibiæ with four minute spurs. Wings rather long and narrow. Fore wings very much longer than the hind wings; second inferior vein hardly further from the third than from the first; fourth curved near the base, full four times further from the third than the third is from the second. Abdomen extending for half its length beyond the hind wings. *Male.*—Antennæ minutely pectinated. *Fem.*—Antennæ simple.

1. Biturix diversipes.

Albus; palpi apice nigri; antennæ subtus nigræ; abdomen supra rufum, maculis albis trivittatum; pedes antici nigro vittati, coxis femoribusque rufo vittatis; alæ albo venosæ.

White. Palpi with black tips. Proboscis testaceous. Antennæ black beneath. Thorax with three slender black streaks. Abdomen bright red above, with three rows of black dots. Fore legs with black stripes; coxæ and femora with red stripes. Wings semihyaline, with white veins; costa of the fore wings grayish along the apical half. Length of the body 5½ lines; of the wings 15 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.

Group 2.

Fœmina. Corpus sat gracile. Proboscis mediocriter longa. Palpi breves, graciles, porrecti; articulus 2us 1o multo longior; 3us acuminatus, minimus. Antennæ subpectinatæ. Abdomen alas posticas fere dimidio superans, apice dense fasciculatum. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ longiusculæ, sat angustæ; anticæ posticis valde longiores.

Fem. Body rather slender. Proboscis moderately long. Palpi short, slender, porrect; second joint much longer than the first; third acuminated, very minute. Antennæ very minutely pectinated. Abdomen extending for nearly half its length beyond the hind wings, thickly tufted at the tip. Legs rather long and slender; hind tibiæ with four minute spurs. Wings rather long and narrow. Fore wings very much longer than the hind wings; first and second inferior veins contiguous at the base; third about thrice further from the fourth than from the second.

2. Biturix intactus.

Albus; antennæ subtus nigræ; palpi testacei apice nigri; thorax antice testaceus; abdomen supra testaceum, e guttis nigris trivittatum, apice albo lanuginosum; coxæ anticæ testaceæ; alæ albo venosæ.

White. Palpi testaceous, with black tips. Proboscis testaceous. Antennæ black beneath. Thorax testaceous above in front. Abdomen testaceous above, with three rows of black dots, thickly covered with white wool at the tip. Fore coxæ testaceous. Wings with white veins. Length of the body 4½ lines; of the wings 13 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 46. PURIUS.

Mas. Corpus breviusculum, sat validum. Proboscis corporis dimidio brevior. Palpi pilosi, sat longi, subascendentes; articulus 2us 1o multo longior; 3us acuminatus, minimus. Antennæ sat late pectinatæ. Abdomen alas posticas paullo superans. Pedes breviusculi; tibiæ posticæ calcaribus quatuor parvis. Alæ sat angustæ.

Male. Body rather short and stout. Proboscis not half the length of the body. Palpi hairy, rather long, slightly ascending; second joint much longer than the first; third acuminated, very minute. Antennæ rather deeply pectinated. Abdomen extending rather beyond the hind wings. Legs rather short; hind tibiæ with four small spurs. Wings rather narrow. Fore wings straight in front; second inferior vein equally distant from the first and from the third; third about six times further from the fourth than from the second. Hind wings slightly convex in front.

1. Purius sordidus.

Mas. *Pallide fuscus, subtus canus; abdomen supra rufum, fasciis nigris; tarsi obscure fusci, fasciis pallidis; coxæ anticæ lateribus rufis; femora antica rufa, apice nigra; alæ anticæ fusco conspersæ, costa venisque fusco guttatis; posticæ albidæ.*

Male. Pale brown, hoary beneath. Proboscis tawny. Antennæ hoary above. Abdomen red above, with black bands. Tarsi dark brown, with pale bands; fore coxæ red on each side; fore

femora red, with black tips. Fore wings sprinkled with brown, and with brown dots along the costa and on the veins. Hind wings whitish. Length of the body 5 lines; of the wings 14 lines.

a. Parà. Presented by J. P. G. Smith, Esq.
b. Venezuela. From Mr. Dyson's collection.

Genus 47. APHYLE.

Corpus mediocriter robustum. Proboscis sat longa. Palpi validiusculi, subarcuati, oblique ascendentes; articulus 2us 1o valde longior; 3us conicus, 2i dimidio paullo brevior. Abdomen alas posticas paullo superans. Pedes mediocriter validi, longiusculi; tibiæ posticæ calcaribus quatuor sat parvis. Alæ longiusculæ, sat angustæ; anticæ posticis multo longiores.

Body moderately stout. Proboscis moderately long. Palpi rather stout, slightly curved, obliquely ascending; second joint very much longer than the first; third conical, rather less than half the length of the second. Abdomen extending for one-fourth of its length beyond the abdomen. Legs moderately stout, rather long; hind tibiæ with four rather small spurs. Wings rather long and narrow. Fore wings much longer than the hind wings; first, second and third inferior veins contiguous at the base; fourth moderately remote.

1. APHYLE MARGARITACEUS.

Albus; caput antice luteum; palpi supra nigri; pedes anteriores fusco-fasciati; alæ margaritaceæ, anticæ fasciis tribus interruptis fuscis. Mas.—*Thorax nigro biguttatus; abdomen et alæ posticæ subcrocea.*

Male. White. Head luteous in front of the antennæ, and with luteous hairs beneath. Palpi black, white beneath. Proboscis testaceous. Antennæ brown. Thorax with a black dot on each side. Abdomen saffron above. Fore and middle legs with brown bands. Wings with a pearly lustre. Fore wings luteous along the costa, and with three brown oblique bands, the first composed of three spots, the second of two streaks, the third entire, curved inward; a black streak on the costa beyond it. Hind wings pale saffron, white in front. *Female*.—White. Thorax without black dots. Abdomen very slightly testaceous in the disk above towards the tip. Wings less pearly than in the male. Fore wings indistinctly testaceous along the costa; middle spot of the first band wanting. Hind wings quite white. Length of the body 4—5½ lines; of the wings 12—14 lines.

a, *b*. Parà. From Mr. Bates' collection.

Genus 48. AMAXIA.

Mas. Proboscis breviuscula, corporis dimidio brevior. Palpi ascendentes, mediocriter longi; articulus 3us conicus, minimus. Antennæ subpectinatæ, corporis dimidio longiores. Abdomen alas posticas sat longe superans. Sexualia parva, occulta. Pedes breviusculi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ angustæ.

Male.—Proboscis rather stout, less than half the length of the body. Palpi ascending, moderately long; third joint conical, very minute. Antennæ minutely pectinated, three-fourths of the length of the body. Abdomen extending some distance beyond the hind wings; sexualia small, concealed. Legs rather stout; fore tibiæ with short apical spurs; hind tibiæ with four rather short spurs. Wings narrow. Fore wings with two superior veins; discal fold distinct; first inferior vein curved, near the second at its base; third a little nearer to the second than to the fourth. Hind wings convex along the fore border; costal vein springing from the subcostal opposite the middle of the areolet; three inferior veins; first and second united at the base, third at some little distance from them.

1. Amaxia pardalis.

Læte flavâ, subtus alba; antennæ testaceæ; abdomen supra rufum; alæ anticæ ex parte rufo venosæ guttis plurimis variis fuscis, posticæ albæ.

Bright yellow. Body, palpi and legs white beneath. Palpi striped with brown. Proboscis and antennæ testaceous. Abdomen red above, yellow at the tip. Tibiæ with a few brown dots; fore tibiæ partly red. Fore wings with numerous brown dots and spots of various size, and irregularly disposed, partly bordered with red, some of them forming two incomplete bands, one near the base, the other near the tip. Hind wings white, slightly tinged with yellow and red, their fore border very convex. Length of the body 5 lines; of the wings 15 lines.

a. Ega, on the Amazon. From Mr. Bates' collection.

Genus 49. THEAGES.

Mas. Corpus gracile. Proboscis mediocriter longa. Palpi ongiusculi, oblique ascendentes, fere nudi; articulus 2us 1o valde longior; 3us gracilis, lanceolatus, 2i triente æqualis. Antennæ ongiusculæ, subpectinatæ. Abdomen alas posticas triente superans. Pedes longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ.

Male. Body slender. Proboscis moderately long. Palpi rather long, obliquely ascending, nearly bare; second joint very much longer than the first; third slender, lanceolate, about one-third of the length of the second. Antennæ minutely pectinated, rather long. Abdomen extending for one-third of its length beyond the hind wings. Legs rather long; hind tibiæ with four long spurs. Wings narrow. Fore wings with the first and second inferior veins contiguous at the base; third very near the second; fourth remote from the third.

A. Thorax vittis tribus interruptis fuscis. - leucophæa, *Walk.*
B. Thorax e maculis nigris bifasciatus. - - quadricolor, *Walk.*

1. THEAGES LEUCOPHÆA.

Albida; caput fusco varium; antennæ nigræ; thorax vittis tribus interruptis fuscis; abdomen cinereo-fuscum, apice luteum, subtus albo bivittatum; pedes cinereo-fusci, albo vittati; alæ anticæ basi maculisque anticis discalibusque fuscis; posticæ cinereo hyalinæ fusco marginatæ.

Whitish. Head brown in front and beneath, and with a large brown spot on the vertex. Proboscis tawny. Palpi white beneath towards the base. Antennæ black, white above towards the base. Thorax with three slight brown interrupted stripes. Abdomen grayish brown; tip luteous; under side with two broad white stripes. Legs grayish brown, with white stripes. Fore wings brown at the base, and with brown spots along the borders and on the end of the discal areolet; veins partly streaked with brown; under side more brown. Hind wings grayish hyaline, with brown borders. Length of the body 6 lines; of the wings 18 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

2. THEAGES QUADRICOLOR.

Mas. *Alba; caput subtus nigrum; palpi nigri, apice albi; antennæ nigræ; thorax e maculis nigris bifasciatus; abdomen rufum maculis lateralibus apiceque nigris, subtus albidum; pedes nigro-fusci, albo fasciati; alæ anticæ nigro maculatæ, subtus posticæque cinereæ.*

Male. White. Head black beneath. Proboscis tawny. Palpi black, with white tips. Antennæ black, white towards the base above. Thorax with two bands of black spots. Abdomen bright red, with a row of black spots along each side and with a black tip; under side whitish, with a slight red tinge. Legs blackish brown,

with white bands. Fore wings with numerous black spots; under side dark gray. Hind wings dark gray. Length of the body 4—5 lines; of the wings 12—14 lines.

a, b. Brazil. Presented by H. Low, jun., Esq.
c. Rio Janeiro. From Mr. Stevens' collection.

Genus 50. AGRISIUS.

Corpus sat gracile. Oculi magni, extantes. Proboscis corporis dimidio vix brevior. Palpi longiusculi, subascendentes; articulus 2us 1i longitudine; 3us linearis, 2o paullo longior. Abdomen alas posticas non superans. Pedes mediocriter longi et validi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ.

Body rather slender. Eyes large, prominent. Proboscis nearly half the length of the body. Palpi rather long, slightly ascending; second joint as long as the first; third linear, a little longer than the second. Abdomen extending as far as the hind wings. Legs moderately long and stout; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front; discal fold distinct; second inferior vein as far from the first as from the third; third nearly four times further from the fourth than from the first. Hind wings straight in front; first, second and third inferior veins connected at the base.

1. AGRISIUS GUTTIVITTA.

Argenteo-albus; palpi nigri, subtus albi; thorax e maculis nigris bifasciatus; femora tibiæque nigro vittata; tarsi nigri, albo fasciati; alæ anticæ basi nigro guttatæ, apice fusco vittatæ, posticæ fusco vittatæ.

Silvery white. Proboscis testaceous. Palpi black, white beneath; second joint white at the tip. Thorax with two bands of black spots, and with a black spot in the disk between them. Femora and tibiæ with black stripes; tarsi black, with white bands. Fore wings with black dots on the basal half; apical half with brown stripes on the veins; under side mostly brown. Hind wings with brown stripes, except towards the base above. Length of the body 5? lines; of the wings 17 lines.

a. North India. Presented by Capt. Parry.

Genus 51. AMASTUS.

Phægoptera, p., *Moriz; Herr.-Schæff.*

Palpi ascendentes, longiusculi; articulus 2us 3oque duplo longior; 3us parvus, conicus, 2o multo gracilior. Proboscis corporis

dimidio multo longior. Antennæ corpore paullo breviores. Abdomen alas posticas longe superans. Pedes longiusculi, fere nudi; tibiæ posticæ calcaribus quatuor sat longis. Alæ longiusculæ, sat angustæ. *Mas.*—Antennæ late pectinatæ. Sexualia longa; forceps valida, arcuata. *Fœm.*—Antennæ mediocriter pectinatæ.

Proboscis much more than half the length of the body. Palpi ascending, rather long; third joint small, conical, much more slender than the second, and about one-fourth of its length. Antennæ nearly three-fourths of the length of the body, pectinated in both sexes. Abdomen extending much beyond the hind wings. Legs rather long, nearly bare; hind tibiæ with four rather long spurs. Wings rather long and narrow, thinly pubescent. Fore wings with two superior veins; discal fold distinct in the discal areolet, and for a short distance beyond; first and second inferior veins nearly contiguous at the base; third four times further from the fourth than from the second. Hind wings with one superior vein, which at its tip is very near the discal fold; the latter is distinct along the whole length of the wing: first and second inferior veins almost contiguous at the base; third about six times further from the fourth than from the second. *Male.*—Antennæ rather deeply pectinated. Sexual appendages long; forceps stout, curved. *Female.*—Antennæ moderately pectinated.

1. AMASTUS COLLARIS.

Luteus; caput subtus et pectus antice rufescentia, illum antice album; palpi nigri, basi rufi; antennæ nigræ; thorax fascia antica arcuata vittisque duabus albis; abdomen rufescens, apicem versus nigrum fasciis albis, subtus album nigro marginatum; pedes nigri, femoribus subtus albidis; alæ subhyalinæ, anticæ cervinæ, posticæ albidæ.

Phægoptera collaris, *Moriz; Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 15, f. 63.

Luteous-tawny. Head beneath, and pectus in front reddish. Head white in front. Proboscis tawny. Palpi black, red at the base. Antennæ black. Thorax with a curved white band in front, and with two white stripes, which diverge hindward. Abdomen above reddish black, with white bands towards the tip, which is white; disk of the under side white, bordered with black. Legs black; femora whitish beneath. Wings subhyaline. Fore wings fawn-colour; veins tawny. Hind wings whitish; veins testaceous. Length of the body 8—10 lines; of the wings 26—30 lines.

a—d. Venezuela. From Mr. Dyson's collection.

Genus 52. AMERILA.

Group 1.

Mas et fœm. Proboscis longa, corporis dimidio longior. Palpi ascendentes, longiusculi; articulus 3us sublinearis, 2o duplo brevior vix gracilior. Antennæ simplices, corporis dimidio multo breviores. Abdomen alas posticas longe superans. Pedes longiusculi, fere nudi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ.

Body nearly linear and cylindrical. Proboscis not less than half the length of the body. Palpi long, ascending; third joint more than half the length of the second. Antennæ simple in both sexes, much more than half the length of the body. Abdomen extending much beyond the hind wings. Legs long; posterior tibiæ with four very long spurs. Wings long, partly hyaline or semihyaline. Fore wings slightly pointed; three superior veins; discal fold distinct; first, second and third inferior veins near together at the base; third more than thrice further from the fourth than from the first. Hind wings slightly convex in front; first and second inferior veins contiguous at the base; third more than four times further from the fourth than from the second.

A. Thorax posticus nigro maculatus.
A. Thorax rufo fasciatus. - - - - Astræa, *Drury.*
B. Thorax rufo non fasciatus. - - - mauritia, *Cram.*
B. Thorax posticus nigro non maculatus. - Melanthus, *Cram.*

1. AMERILA ASTRÆA.

Var. *Thorax murinus, punctis nigris; abdomen supra rufum* (var. *albido-cinereum, basi anoque supra rubellis*), *subtus flavidum, lateribus punctis nigris; palpi rufi, apice nigri; pedes subcinerei, intus rufi; alæ anticæ albido murinæ, subdiaphanæ, costa, macula media apiceque fuscis, basi punctis duobus nigris; posticæ albido submurinæ, subdiaphanæ.*

Sphinx Astreas, *Drury, Ins.* ii. pl. 28, f. 4.
Noctua Astrea, *Fabr. Sp. Ins.* ii. 213, 21; *Mant. Ins.* ii. 137, 26; *Ent. Syst.* iii. 2, 19, 35. *Gmel. ed. Syst. Nat.* i. 5, 2534, 593.
Glaucopis? Astrea, *Westw. Ed. Drury*, ii. pl. 28, f. 4.
Chelonia saucia, *Boisd. Voy. l'Astrolabe, Ent.* i. 214.
Lithosia Arthus Bertrand, *Guér. Voy. Duperrey, Atlas, Ins.* pl. 19, f. 5.
Chelonia Astræa, *Guér. Voy. Duperrey, Texte*, 284.

White. Head with a black dot on the vertex and another on the front. Proboscis tawny. Palpi red, with three black bands; a whitish streak beneath. Antennæ brown, red at the base. Thorax with fourteen black dots; prothorax with red borders. Pectus with three black spots on each side. Abdomen bright red above, with two rows of black dots along each side. Legs bright red; femora white beneath; anterior tibiæ and fore tarsi blackish above; fore femora streaked with brown beneath. Fore wings brown, white towards the base, which has three white spots; middle part nearly hyaline, except the borders and a streak across the tip of the discal areolet. Hind wings pale fawn-colour, whitish along the fore border and the interior border. Length of the body 8—10 lines; of the wings 20—26 lines.

a. Australia. From the Voyage of H.M.S. Rattlesnake.
b. Australia. From Mr. Hunter's collection.
c. Australia. From Mr. Children's collection.
d. Australia. From Mr. Milne's collection.

2. AMERILA MAURITIA.

Rufo-cervina; caput nigro quadripunctatum; palpi nigri, rufo bivittati; antennæ nigræ; thorax nigro decem maculatus; pectus nigro sexguttatum; pedes rufi; alæ anticæ basi nigro biguttatæ; posticæ albidæ.

Phalæna mauritia, *Cram. Pap. Exot.* iv. 105, pl. 345, f. B.
Arctia mauritia, *Boisd. Faun. Ent. Mad. Bomb. et Maur.* 86.
Phalæna vidua? *Cram. Pap. Exot.* iii. 127, pl. 264, f. C.
Pelochyta vidua? *Hübn. Verz. Schmett.* 172, 1772.

Guinea. Mauritius.

Reddish fawn-colour. Head with two black dots on the vertex and one on each side in front. Proboscis piceous. Palpi black, with two red bands. Antennæ black, fawn-colour at the base. Thorax with ten black dots. Pectus with about three black dots on each side. Abdomen red above, with two rows of black dots along each side. Legs red; a black dot on each coxa. Fore wings with two black dots at the base; disk more or less hyaline. Hind wings whitish, with a very slight tinge of fawn-colour. Length of the body 6—7½ lines; of the wings 16—20 lines.

a, b. West Africa. From Mr. Hewitson's collection.
c. Congo. Presented by Sir J. Richardson.
d—f. Congo. Presented by E. Doubleday, Esq.
g. ——— ? From Mr. Milne's collection.

3. Amerila Melanthus.

Albida; thorax fascia antica rufa; abdomen rufum; alæ anticæ costæ bis triente apicali, triente apicali lituraque discali connexa fuscis, plaga magna discali limpida guttisque basi nigris, posticæ plus dimidio antico et apicali limpido apice fusco.

Phalæna Melanthus, *Cram. Pap. Exot.* iii. 166, pl. 286, f. B.
Rhodogastria Melanthus, *Hübn. Verz. Schmett.* (*Phalænæ Venæ Hipocritæ Sphingiformes*) 172, 1774.

Ceylon.

Group 2.

Mas et fœm. Corpus lineare, subcylindricum. Proboscis corporis dimidio non brevior. Palpi longiusculi, ascendentes; articulus 2us 1o multo longior, 3us minimus. Antennæ simplices. Abdomen alas posticas longe superans. Pedes mediocriter longi et graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ sat longæ et angustæ, ex parte hyalinæ aut semihyalinæ.

Phægoptera, p., *Boisd.; Herr-Schæff.*

Body linear, nearly cylindrical. Proboscis not less than half the length of the body. Palpi rather long, ascending; second joint much longer than the first; third extremely minute. Antennæ simple in both sexes. Abdomen extending much beyond the hind wings. Legs moderately long and slender; hind tibiæ with four small spurs. Wings rather long and narrow, partly hyaline or semihyaline; discal fold indistinct; first and second inferior veins almost contiguous at the base; third about thrice further from the fourth than from the second. Hind wings convex in front; first inferior vein very near the second and the third, which are united at the base; fourth springing from the middle of the length of the discal areolet.

4. Amerila erythronota.

Fœm. *Testacea; subtus albida; palpi rufi, subtus albi; antennæ fuscæ; abdomen supra rufum; pedes albi, femoribus anticis supra rufis apice cervinis, femoribus posterioribus apice tibiisque posterioribus basi tibiisque anticis cervinis; alæ anticæ fusco conspersæ, ex parte cervinæ, striga antica rufa maculaque maxima subapicali limpida; posticæ albæ, sublimpidæ.*

Phægoptera erythronota, *Boisd; Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 14, f. 58 (1853).

Male. Gray, sprinkled with black. Head mostly yellow. Palpi red. Thorax with a yellow curved band, behind which are two red spots, and a larger one behind. Abdomen bright red, with a white spot at the base, white at the tip, and with a row of white dots along each side. Fore wings testaceous, with a few black streaks towards the base, with a hindward white stripe, and with a short oblique discal white band, both bordered with black. Hind wings white.

Venezuela.

Female. Testaceous, whitish beneath. Proboscis tawny. Palpi red, white beneath. Antennæ pale brown, red at the base. Abdomen red above. Legs white; fore femora red above, with fawn-coloured tips; fore tibiæ fawn-colour; posterior femora towards the tips and posterior tibiæ towards the base fawn-colour. Fore wings powdered with brown, partly fawn-colour; a red interrupted streak along part of the fore border, and a transverse red mark in the disk at one-fourth of the length; a white dot between this mark and the hind border; some red hairs at the base of the hind border; exterior border brown; a very large limpid brown-bordered spot beyond the middle, extending to the fore border, which there is white, and nearly to the hind border; veins testaceous, dotted with brown in the limpid part. Hind wings white, nearly hyaline, with reddish hairs along the inner border. Length of the body 5—7 lines; of the wings 15—18 lines.

Var. β. Fore wings with the transverse mark and the dot near the base yellow; exterior border with testaceous dots.

a. Rio Janeiro. From Mr. Stevens' collection.
b. Brazil. Presented by W. W. Saunders, Esq.
c. ———?

Genus 53. OPHARUS.

Mas. Corpus gracile. Proboscis longa. Palpi longi, graciles, porrecti, caput longe superantes; articulus 2us 1o multo longior; 3us linearis, 2o multo gracilior et paullo brevior. Antennæ mediocriter pectinatæ. Abdomen alas posticas dimidio superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longæ, angustæ.

Male. Body slender. Proboscis long. Palpi long, slender, porrect, extending far beyond the head; second joint much longer

than the first; third linear, more slender and rather shorter than the second. Antennæ moderately pectinated. Abdomen extending for half its length beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings long, narrow. Fore wings with the first and second inferior veins springing from a short common petiole, which is contiguous to the third; first curved forward; fourth rather remote from the third.

1. OPHARUS PROCROIDES.

Mas. *Obscure fusca; abdominis latera testaceo maculata; pedes longiusculi, sat graciles; alæ anticæ subtus basim versus testaceo notatæ; posticæ subtus basi albidæ.*

Male. Dark brown. Proboscis testaceous, long. Sides of the abdomen with testaceous spots, which increase in size towards the tip. Legs rather long and slender. Fore wings with a testaceous mark near the base beneath. Hind wings whitish towards the base beneath. Length of the body 6½ lines; of the wings 18—20 lines.

a, *b*. Brazil. From M. Becker's collection.
c. Rio Janeiro. From Mr. Stevens' collection.

Genus 54. CARALES.

Corpus sat robustum. Proboscis mediocriter longa. Palpi longiusculi, ascendentes, fere nudi; articulus 2us lo valde longior; 3us gracilis, lanceolatus, brevis. Antennæ longiusculæ, sat graciles. Abdomen alas posticas triente superans. Pedes longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ longæ, non latæ. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ simplices.

Body moderately stout. Proboscis of moderate length. Palpi rather long, ascending, nearly bare; second joint very much longer than the first; third slender, lanceolate, about one-fourth of the length of the second. Antennæ rather long and slender. Abdomen extending for about one-third of its length beyond the hind wings. Legs rather long; hind tibiæ with four long spurs. Wings long, not broad. Fore wings with the first and second inferior veins almost contiguous at the base; first curved forward; third about thrice further from the fourth than from the second. *Male.*—Antennæ very minutely pectinated. *Female.*—Antennæ simple.

A. Abdomen maculatum.
  A. Alæ anticæ ocellatæ.
    a. Alæ posticæ non fasciatæ. - - - albicans, *Walk.*
    b. Alæ posticæ fasciatæ. - - - maculicollis, *Walk.*
  B. Alæ anticæ non ocellatæ. - - phrygamoides, *Walk.*
B. Abdomen non maculatum. - - - abdominalis, *Walk.*

1. Carales albicans.

Mas. *Albida, nigro maculata; antennæ fuscæ; abdomen luteum, e maculis nigris trivittatum, subtus testaceum vitta dorsali maculari nigra; alæ anticæ ocellis angulosis incompletis fuscis maculisque costalibus obscurioribus, posticæ cinereo marginatæ.*

Male. Whitish. Head with a black spot on the vertex. Proboscis tawny. Palpi with two black bands. Antennæ brown, whitish at the base. Thorax with a short black stripe and two black spots on each side. Abdomen above pale luteous, with three rows of black spots; under side pale testaceous, with one row of black spots. Tarsi brown. Fore wings with numerous brown oblique zigzag lines, which form imperfect ringlets, and with some darker brown spots along the costa, with one at the end of the discal areolet, and with some near the base and along the outer border. Hind wings with grayish borders. Length of the body 8 lines; of the wings 25 lines.

a. Venezuela. From Mr. Dyson's collection.

2. Carales maculicollis.

Fœm. *Albida; caput et palpi nigro maculata; antennæ fulvæ; thorax vittis duabus macularibus nigris; abdomen luteum, e maculis nigris trivittatum; pedes lutei, albido vittati nigroque maculati; alæ anticæ fasciis obliquis ocellaribus fuscis maculisque costalibus subquadratis fuscis albisque, posticæ costa fasciaque pallide fuscis.*

Female. Whitish. Head with a black spot on the vertex and a smaller one in front. Proboscis tawny. Palpi pale luteous, with three black spots on each side. Antennæ tawny. Thorax with two stripes of black spots, clothed towards the abdomen with long testaceous hairs. Abdomen above and beneath pale luteous, with three rows of black spots. Legs pale luteous, with whitish streaks and with black spots. Fore wings with oblique brown bands, which

form more or less regular ringlets, and along the costa with subquadrate alternately brown and white spots; a black dot at the base. Hind wings mostly pale brown along the border, and with an incomplete pale brown band in the disk. Length of the body 6 lines; of the wings 20 lines.

a. Brazil. From M. Becker's collection.

3. Carales phryganoides.

Fœm. *Cana; antennæ ferrugineæ; thorax nigro maculatus fuscoque quadrivittatus; abdomen luteum, vittis macularibus nigris; pedes fusci, tibiis tarsisque albido fasciatis; alæ anticæ fusco variæ fasciisque duabus obliquis albidis, posticæ cinereæ fascia obliqua albida.*

Female. Hoary. Proboscis tawny. Palpi with a luteous mark on each towards the base. Antennæ ferruginous, hoary at the base. Thorax with black dots, with two black spots in front, and with four brown stripes. Abdomen pale luteous, with a stripe of black spots above, with one on each side, and with one beneath; the dorsal stripe shortened in front. Legs brown; tibiæ and tarsi with whitish bands; fore coxæ partly luteous. Fore wings with various minute brown marks, which are partly confluent, and with two oblique irregular and incomplete whitish bands. Hind wings gray, with an irregular oblique whitish band, whitish towards the base beneath where the band is most apparent. Length of the body 7 lines; of the wings 22 lines.

a. ———? Presented by E. Doubleday, Esq.

4. Carales abdominalis.

Cinerea; antennæ nigræ, basi flavæ; thorax fusco trivittatus; abdomen luteum, basi fuscum, subtus testaceum apice fuscum; tibiæ fusco fasciatæ; tarsi nigricantes fasciis albidis; alæ anticæ strigis ocellisque obscurioribus.

Gray. Head pale luteous behind. Proboscis tawny. Third joint of the palpi pale yellow towards the base. Antennæ black, pale yellow at the base beneath. Thorax with three brown stripes. Abdomen above luteous, brown at the base; under side testaceous, with a brown tip. Legs with testaceous tomentum; tibiæ with a brown band; tarsi blackish, with whitish bands. Fore wings pale

cinereous, with various grayish streaks and ringlets. Hind wings gray. Length of the body 5 lines; of the wings 13 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 55. HALESIDOTA.

Corpus robustum. Proboscis longa. Palpi validi, porrecti, non longi; articulus 2us 1o multo longior; 3us conicus, minimus. Abdomen alas posticas tuente superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longæ, angustæ. *Mas.*—Antennæ subpectinatæ. *Fœmina.*—Antennæ serratæ.

Halesidota, *Hübn. Verz. Schmett.* 170.
Phægoptera, p., *Boisd. Herr.-Schæff.*
Phalæna, p., *Abbot & Smith.*
Lophocampa, *Harris, Ins. Massachus.* 258.

Body stout. Proboscis long. Palpi stout, porrect, not long; second joint much longer than the first; third conical, very minute. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings long, narrow. Fore wings with the first and second inferior veins contiguous at the base; third about four times further from the second than from the fourth. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ serrated.

North America.

A. Alæ anticæ quadrifasciatæ.
A. Alæ anticæ fasciis non macularibus. - tessellaris, *Abbot.*
B. Alæ anticæ fasciis macularibus. - annulifascia, *Walk.*
B. Alæ anticæ bifasciatæ. - - - - - - fulvo-flava, *Walk.*

1. HALESIDOTA TESSELLARIS.

Cristata flavescens; alæ angustatæ, anticæ fasciis tessellatis saturatioribus.

Phalæna tessellaris, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 149, pl. 75.

Halesidota tessellaris, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*), 170, 1753.

Var. Mas. et fœm. *Lutea; facies nigra; palpi nigri, luteo bifasciati; antennæ nigræ; prothorax viridi fasciatus; mesothorax viridi trivittatus; abdomen subtus testaceum; pedes testacei, nigro fasciati; alæ anticæ pallide testaceæ fasciis quatuor obscurioribus nigro marginatis et intersectis.*

Male and fem. Pale luteous. Face black. Proboscis ferruginous. Palpi black, with two luteous bands. Antennæ black, luteous at the base. Prothorax with a green band along the hind border. Mesothorax with three green stripes, the lateral pair diverging hindward; a black streak on each side near the fore wing. Abdomen testaceous beneath. Legs testaceous; knees, tibiæ and tarsi with black bands. Fore wings pale testaceous, with four testaceous bands, which are bordered and intersected with black; the first and the second are double in front, the third does not extend far from the hind border, and the fourth is forked in front. Length of the body 6—8 lines; of the wings 20—22 lines.

a. United States. Presented by E. Doubleday, Esq.
b. United States.
c, d. United States. From Mr. Milne's collection.
e, f. Mexico. Presented by E. Doubleday, Esq.
g. ———? Presented by W. F. Evans, Esq.
h. Venezuela. From Mr. Dyson's collection.

The preceding description is of the Venezuela specimen, which is much darker than the others; the Mexican one resembles it most in that character.

2. Halesidota fulvo-flava.

Mas. et fœm. *Testacea; thorax maculis duabus anticis vittisque duabus fulvis; tibiæ tarsique antica fulva; alæ anticæ flavæ fulvo bifasciatæ, aut fulvæ flavo maculatæ; posticæ albidæ.*

Testaceous, paler beneath. Proboscis tawny. Thorax with two tawny stripes, which converge hindward, and with two tawny spots in front between the stripes. Femora and tibiæ hairy; fore femora and fore tibiæ tawny above. Fore wings yellow, with a tawny spot at the base, with two oblique tawny bands, with darker borders; these bands are partly connected, and the inner one is especially irregular and ramose, being forked in front, and dilated in the disk towards the base, and emitting a branch to each border. Hind wings whitish, with a slight testaceous tinge. Length of the body 6—7 lines; of the wings 16—18 lines.

Var. β. Fore wings tawny, with yellow spots at the base, at the tips, along the costa, and forming an oblique band beyond the middle.

a. Nova Scotia. From Lieut. Redman's collection.
b, c. North America.
d. North America. From Mr. Milne's collection.

3. Halesidota annulifascia.

Mas. et fœm. *Pallide testacea; antennæ fulvæ; thorax fulvo bivittatus; alæ anticæ fulvo punctatæ et e maculis albidis fulvo marginatis quadrifasciatæ; posticæ albidæ.*

Pale testaceous. Proboscis and antennæ tawny. Thorax with two tawny stripes, which converge hindward. Fore wings with tawny punctures, which are most numerous, and partly confluent on the disk beyond the middle, and with four oblique bands of whitish tawny-bordered spots; veins tawny. Hind wings whitish, with a slight testaceous tinge. Length of the body 6—8 lines; of the wings 18—22 lines.

a—d. United States. Presented by E. Doubleday, Esq.

Mexico.

4. Halesidota bicolor.

Mas. *Rufo-fulva; caput et pectus alba; antennæ supra albidæ; thorax albo trivittatus; alæ anticæ testaceæ submaculatæ, posticæ albæ.*

Male. Reddish tawny. Head white. Proboscis tawny. Antennæ whitish above. Thorax with three white stripes. Pectus white. Fore femora and fore tibiæ thickly clothed with white hairs. Fore wings testaceous, with indistinct hyaline spots. Hind wings white. Length of the body 7 lines; of the wings 17 lines.

The specimen of this species is injured, and it may be a variety of *H. annulifascia.*

a. Mexico. Presented by E. Doubleday, Esq.

West Indies.

A. Alæ anticæ non maculatæ nec vittatæ. - insulata, *Walk.*
B. Alæ anticæ maculatæ. - - - - - palpalis, *Walk.*
C. Alæ anticæ vittatæ. - - - - strigosa, *Walk.*

5. Halesidota insulata.

Fœm. *Pallide testacea; caput luteo fasciatum; palpi apice nigricantes; antennæ nigræ; abdomen supra luteum; pedes nigricantes, coxis subtus luteis.* Mas.—*Femora lutea, apice nigra, antica supra nigricantia.* Fœm.—*Abdomen vittis guttularibus nigris; femora subtus albido testacea.*

Fem. Pale testaceous, paler beneath. Head with a pale luteous band behind the antennæ. Proboscis tawny. Palpi blackish above towards the tips. Antennæ black, pale luteous at the base. Abdomen above luteous. Legs blackish; coxæ luteous. Hind wings a little paler than the fore wings. *Male.*—Abdomen unspotted. Femora luteous, with black tips; fore femora blackish above, except towards the base. *Fem.*—Abdomen with rows of black dots; femora blackish above, whitish testaceous beneath. Length of the body 5—6 lines; of the wings 14—15 lines.

a—c. Jamaica. From Mr. Gosse's collection.
d. Jamaica.

Var. β. *Isabellina; palpi supra nigri; antennæ nigræ; abdomen supra luteum, vittis guttularibus nigris; pedes femoribus tibiisque apice cinereis, antici nigricantes.*

Cream-colour. Palpi black above and towards the tips. Antennæ black, cream-colour at the base. Abdomen luteous above, with three rows of black dots. Fore legs blackish above; middle tibiæ and tips of the posterior femora and of the hind tibiæ gray. Length of the body 4—5 lines; of the wings 14—16 lines.

Var. γ like *var.* β. Abdomen without the middle row of black dots.

a, b. St. Domingo. From Mr. Tweedie's collection.
c. St. Domingo. From Mr. Hearne's collection.
d. Venezuela. From Mr. Dyson's collection.
e. Santarem, Brazil. From Mr. Bates' collection.

6. Halesidota palpalis.

Mas. *Obscure fusca; caput supra albidum, fusco bimaculatum; palpi apices versus testaceo fasciati; antennæ nigræ; thorax maculis sex albis luteo marginatis; pectus abdomen et pedes lutea; tibiæ tarsique antica fusca, albo fasciata; tibiæ tarsique posteriora fusco fasciata, alæ anticæ albo testaceoque maculatæ, posticæ luteæ.*

Male. Deep brown. Vertex and front whitish, with two brown spots. Proboscis piceous. Palpi with a testaceous band near the tips. Antennæ black. Thorax with six white luteous-bordered spots, two in front, and two on each side by the wings, the hind pair elongated. Pectus, abdomen and legs luteous. Fore tibiæ and fore tarsi brown, the former and the fore metatarsus each with a broad white band; posterior tibiæ and posterior tarsi with brown bands.

Fore wings with four clusters of white and testaceous spots, one at the base, one on each border before the middle, and the largest one extending hindward from the tip to the inner angle; the testaceous spots are smaller and less numerous than the white spots which mostly enclose them. Hind wings luteous. Length of the body 6 lines; of the wings 16 lines.

a. Jamaica. From Mr. Gosse's collection.

7. HALESIDOTA STRIGOSA.

Fusca; caput albo fasciatum; palpi subtus et apice albidi; thoracæ albido quadrivittatus, antice rufo-albo marginatus et univittatus; pectus albidum, fusco bifasciatum; abdomen coccineum, e maculis nigris bivittatum, apice nigro, subtus albidum vittis quatuor macularibus nigris; pedes albidi fusco vittati, tibiis rufo vittatis; alæ anticæ albido strigatæ; posticæ sublimpidæ fusco marginatæ.

Head and thorax brown above. Head whitish about the eyes, and with a whitish band on the vertex. Palpi brown, whitish beneath and towards the tips. Antennæ whitish, with brown branches. Pectus whitish, with two brown bands. Thorax with four whitish stripes; fore part bordered with reddish white, and with one stripe of the same colour. Abdomen crimson, black at the tip, and with a row of black spots along each side; under side whitish, with four rows of black spots. Legs whitish; femora and tibiæ striped with brown; tibiæ striped with red. Fore wings brown, with very numerous whitish streaks. Hind wings almost limpid, with more or less broad brownish borders. Length of the body 5—7 lines lines; of the wings 16—22 lines.

a, *b*. St. Domingo. From Mr. Tweedie's collection.

South America.

A. Alæ non virides.
A. Caput non album.
a. Thorax non vittatus, nec maculatus.
a. Thorax testaceus.
i. Alæ ocellatæ - - - - strigulosa, *Walk.*
ii. Alæ non ocellatæ.
* Alæ non fasciatæ.
† Alæ punctatæ. - - - bipunctata, *Walk.*
†† Alæ non punctatæ. - - cornea, *Moriz.*
** Alæ fasciatæ. - - - - annulosa, *Walk.*
b. Thorax cervinus. - - - - specularis, *Boisd.*

B. Thorax vittatus.
  a. Thorax nigro-fuscus, albo bivittatus. histrionica, *Boisd.*
  b. Thorax fuscus, nigro trivittatus. - nemophila, *Boisd.*
  c. Thorax luteus, subpurpureo bivittatus. coprophora, *Moriz.*
  d. Thorax testaceus, fusco bivittatus. - - Alsus, *Cram.*
  e. Thorax testaceus, viridi trivittatus. interlineata, *Walk.*
  f. Thorax albidus, fusco bivittatus. - cinerascens, *Walk.*
  g. Thorax albus, fusco 4-maculatus. - - Pica, *Walk.*
C. Thorax maculatus.
  a. Thorax nigro-fuscus, luteo maculatus. flavo-punctata, *MSS.*
  b. Thorax fusco-cinereus, luteo maculatus. diminuta, *Walk.*
  c. Thorax cervinis guttis nigris. - - cinerea, *MSS.*
  d. Thorax fuscus, luteo bivittatus. - suffusa, *Boisd.*
  e. Thorax testaceus, nigro guttatis. - degenera, *Walk.*

B. Caput album.
  A. Thorax luteus. - - - - - aconia, *Moriz.*
  B. Thorax albus. - - - - - - Eridanus, *Cram.*

B. Alæ virides. - - - - - - - thalassina, *Boisd.*

8. Halesidota strigulosa.

Fœm. *Testacea; abdomen supra subluteum apice et subtus albidum; pedes albidi; alæ anticæ strigis ocellisque fulvis; posticæ albidæ.*

Fem. Pale testaceous. Proboscis testaceous. Palpi and antennæ paler. Abdomen above slightly luteous, whitish towards the tip and beneath. Legs whitish. Fore wings with slight pale tawny streaks, which are indistinct towards the base; slightly convex in front; each areolet with two or three angular streaks towards the base, and with one elongated subfusiform ringlet towards the tip; a slight pale brown discal streak behind the discal areolet; veins pale tawny. Hind wings whitish. Length of the body 6—7 lines; of the wings 18 lines.

Var. β. Testaceous. Streaks of the fore wings with more obtuse and more rounded angles; fusiform ringlets shorter and more irregular.

a. Parà. Presented by J. P. G. Smith, Esq.
b. ———? From Mr. Milne's collection.

9. HALESIDOTA BIPUNCTATA.

Mas. *Testacea; palpi fusci, basi testacei; abdomen supra luteum, basi apiceque testaceum; pedes anteriores supra fuscescentes; alæ anticæ punctis obscurioribus; posticæ albidæ.*

Male. Testaceous. Proboscis tawny. Palpi brown, testaceous at the base. Abdomen above pale luteous, testaceous at the base and at the tip. Anterior legs brownish above. Fore wings minutely flecked with darker testaceous; a blackish dot in front of the tip of the discal areolet. Hind wings whitish. Length of the body 5 lines; of the wings 12 lines.

a. Parà. Presented by J. P. G. Smith, Esq.

10. HALESIDOTA ANNULOSA.

Mas. et fœm. *Testacea; abdomen pallide luteum; alæ anticæ fusco bifasciatæ; posticæ margaritaceæ, sublimpidæ.* Fœm.—*Thorax fusco bifasciatus.*

Male and fem. Testaceous, whitish testaceous beneath. Antennæ whitish above. Abdomen pale luteous, except towards the base. Fore wings with two pale brown bands, one irregular and indistinct, at a little before one-third of the length of the wing, the other regular, distinct and oblique at a little before two-thirds of the length; surface covered with oblique bands of irregular pale brown ringlets, one of which near the tip of the wing has a brown dot on its inner border; veins tawny. Hind wings pearly white, semitransparent. *Fem.*—Thorax with two indistinct pale brown stripes, converging hindward. Length of the body 4—5 lines; of the wings 11—15 lines.

a. Venezuela. From Mr. Dyson's collection.
b. Parà. Presented by J. P. G. Smith, Esq.
c. Parà. From Mr. Steven's collection.

11. HALESIDOTA ALSUS.

Mas et fœm. *Testacea; thorax fusco bivittatus; tibiæ tarsique antica supra fusca; alæ anticæ fasciis plurimis angulosis et ex parte ocellaribus fulvis.* Mas.—*Tarsi intermedii fusco fasciati.* Fœm. — *Thorax antice nonnunquam fusco quadriguttatus.*

Phalæna Alsus, *Cram. Pap. Exot.* ii. 26, pl. 113, f. E.
Halesidota Alsus, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*) 170, 1755.

Surinam.

Male and female. Testaceous. Proboscis tawny. Thorax with two indistinct brown stripes which converge towards the hind border. Fore tibiæ and fore tarsi brown above. Fore wings with numerous oblique zigzag tawny more or less parallel bands; these towards the base are irregular and form ringlets; some of them are occasionally partly brown, especially towards the tips of the wings, and they form a brown mark by the tip of the discal areolet. Hind wings whitish. Length of the body 6—7 lines; of the wings 18—22 lines.

Male. Antennæ with brown plumes. Middle tarsi with brown bands. *Female.*—Thorax in front with four brown dots, which are occasionally obsolete.

a—*c*. Venezuela. From Mr. Dyson's collection.
d. Santa Fé de Bogotá. From Mr. Isaacson's collection.
e. Santa Fé de Bogotá. Presented by E. Doubleday, Esq.

12. Halesidota interlineata.

Testacea; frons nigra; palpi nigri, luteo bifasciati; antennæ nigræ; thorax viridi trivittatus; abdomen supra luteum, nigro bivittatum; pedes nigro varii; alæ anticæ nigro notatæ; posticæ subhyalinæ, testaceo marginatæ.

Testaceous. Front black. Proboscis tawny. Palpi black, with two luteous bands. Antennæ black, testaceous at the base. Thorax with three green stripes, the middle one a little in advance of the lateral pair, which diverge towards the hind border. Abdomen luteous above, with an interrupted slender black stripe along each side. Coxæ, femora and tibiæ with black marks; tarsi luteous, with black bands. Fore wings with four black marks along the costa; first, second and third marks with luteous streaks; first and second connected with double slender black streaks, which are intersected with black and extend to the hind border; first at the base of the wing; second beyond the middle, occasionally forked in front; third and fourth very small, having between them a single slender zigzag black streak, which extends to the hind border. Hind wings nearly hyaline, with testaceous borders; hind border slightly concave. Length of the body 7—8 lines; of the wings 18—21 lines.

a. Brazil? From M. Becker's collection.
b, *c*. Brazil? Presented by E. Doubleday, Esq.

13. Halesidota flavopunctata.

Mas. *Nigro-fusca, luteo varia; abdomen apicem versus luteum; alæ anticæ albæ aut rufo-fuscæ, fasciis fuscis luteo variis; posticæ albidæ aut subcinereæ.*

Chelònia flavopunctata, *MSS.*

Male. Var. α. Blackish brown. Head luteous by the mouth, and with a luteous spot on each side beneath the antennæ. Proboscis ferruginous. Palpi with a luteous spot on each outer side, and with a pale testaceous tip. Thorax with two bands of luteous spots, and with a large luteous tuft on each side behind. Abdomen above luteous towards the tip and along each side, with the exception of a row of blackish brown spots; under side with a stripe of luteous spots along each side and with whitish bands. Legs partly clothed with whitish hairs; coxæ mostly luteous. Fore wings white, with five oblique irregular bands of luteous brown-bordered spots; veins blackish brown. Hind wings whitish, tinged with brown at the tips beneath.

Var. β. Luteous part of the abdomen not extending so far towards the base on each side. Hind wings gray, with brown luteous-spotted borders.

Var. γ. Hind wings gray, excepting a whitish band with grayish streak.

Var. δ. Middle white part of the fore wings clouded with brown. Hind wings gray, with whitish spots.

Var. ε. Fore wings pale reddish brown, with blackish brown bands, which here and there contain luteous spots. Hind wings grayish, brownish about the borders.

Var. ζ like *var. ε.* Spots of the fore wings mostly white. Length of the body 6½—9 lines; of the wings 19—26 lines.

a—f. Brazil? From M. Becker's collection.

14. Halesidota histrionica.

Fœm. *Nigro-fusca; caput luteo varium; thorax albo bivittatus et e maculis luteis trifasciatus; abdomen maculis lateralibus albis luteisque, triente apicali lutea, ventre albida; alæ anticæ fasciis tribus albis tribusque macularibus luteis; posticæ cinereo albido maculatæ.*

Phægoptera histrionica, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 15, f. 68.

Fem. Blackish brown. Head luteous behind and with four luteous spots, two on the vertex and two on the front. Proboscis ferruginous. Palpi with a small luteous spot on each outer side. Thorax with three bands of luteous spots, and with two white stripes which are connected in front and diverge hindward; hind border with a tuft of luteous hairs on each side, and between them a tuft of longer brown hairs. Abdomen above with white and luteous spots along each side; apical third part luteous; under side whitish. Fore coxæ and fore femora partly luteous. Fore wings with three irregular and oblique bands of small luteous spots, and with three irregular white bands; the first mostly along the hind border; the second forming an angle in the disk before the middle, its sides extending to the costa; third zigzag, forked in front. Hind wings grayish brown, with whitish spots. Length of the body 11 lines; of the wings 28 lines.

a. Brazil. Presented by W. W. Saunders, Esq.

15. Halesidota cinerea.

Mas et fœm. *Cervina, subtus testacea; caput et thorax anticus nigro guttata; palpi nigro vittati; abdomen nigro fasciatum et e guttis nigris quadrivittatum; alæ anticæ basi nigro guttatæ.*

Male and fem. Fawn-colour, testaceous beneath. Head above with black dots. Proboscis ferruginous. Palpi with black stripes. Thorax in front with six black dots. Abdomen very hairy towards the base, with black bands, and on each side with two rows of black dots. Fore wings with black dots at the base. Hind wings much paler than the fore wings. Length of the body 6—8 lines; of the wings 22—26 lines.

a—c. Brazil. From M. Becker's collection.
d, e. Venezuela. From Mr. Dyson's collection.

16. Halesidota diminuta.

Mas. *Fusco-cervina; caput apud oculos luteum; thorax luteo maculatus; abdomen supra luteum, maculis dorsalibus trigonis nigro-fuscis; alæ anticæ cervinæ fasciis duabus fuscis cervino guttatis; posticæ cinereæ.*

Male. Brownish fawn-colour. Head luteous about the eyes. Proboscis tawny. Antennæ brown, luteous at the base. Thorax with six or eight luteous dots. Abdomen luteous above, with a tri-

angular blackish brown spot on each segment. Fore coxæ luteous. Fore wings fawn-colour, with a luteous dot at the base and with three slight oblique pale brown bands which contain a few luteous dots; the middle one forked in front. Hind wings gray. Length of the body 5 lines; of the wings 16 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

17. Halesidota degenera.

Fœm. *Testacea, nigro guttata; antennæ fuscæ; abdomen disco et guttis lateralibus fuscis; pedes cervini; alæ subcinereæ, ad costam testaceæ; anticæ basi nigro guttatæ.*

Fem. Testaceous. Head with two black dots, one between the antennæ and one behind. Proboscis tawny. Palpi with two black dots on the outer side. Antennæ brown, testaceous at the base. Thorax with a band of black dots in front; disk fawn-colour, with long hairs. Abdomen above with a dark brown disk, and with a row of dark brown dots along each side. Legs fawn-colour; coxæ testaceous; fore coxæ with a brown mark on each near the base. Wings grayish, testaceous along the costa; veins tawny. Fore wings with black dots at the base. Hind wings hardly paler than the fore wings. Length of the body 5 lines; of the wings 15 lines.

a. Venezuela. From Mr. Dyson's collection.

18. Halesidota cinerascens.

Albida; palpi apice fusci; antennæ nigræ; thorax fusco bivittatus; abdomen supra luteum, basi vittisque tribus maculariibus fuscis; ventre fusco fasciis albis maculisque lateralibus luteis; pedes cervini; alæ subcinereæ ad costam testaceæ; anticæ basi nigro guttatæ.

Whitish. Head behind testaceous, with a brown dorsal spot. Proboscis tawny. Palpi with brown tips. Antennæ black, white above. Thorax with two pale brown stripes, which are curved and connected in front and diverge hindward. Abdomen pale luteous above, brown at the base, and with three rows of brown spots; under side brown, with white bands, which are dilated on each side, where there is a row of luteous spots. Hind tibiæ, except towards the base and tarsi, brown. Fore wings with brown marks of various size and form, and with a luteous dot and a smaller blackish dot at the base. Hind wings gray, mostly white along the fore border and partly whitish beneath. Length of the body 8 lines; of the wings 24 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

19. Halesidota Pica.

Mas. *Alba, nigro maculata; palpi et antennæ nigra; thorax nigro quadrivittatus; abdomen nigrum, luteo bivittatum, disco subtus albo; pedes nigri, albo fasciati; alæ anticæ nigro maculatæ; posticæ margaritaceæ nigro marginatæ.*

Male. White. Head with a black spot on the vertex; hind part luteous on each side. Face and under side black. Proboscis tawny. Palpi black. Antennæ black, with two white streaks above, one near the base, the other near the tips. Thorax with a large black spot in front and a smaller one on each side, and with four black stripes, which are connected hindward. Abdomen black, with a luteous stripe on each side; disk beneath white. Legs black, with white bands. Fore wings with several black spots; the larger spots along the borders, the smaller ones chiefly in the disk. Hind wings nearly white, mostly black along the fore border and the inner border. Length of the body 5½ lines; of the wings 16 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

20. Halesidota nemophila.

Fusca; thorax nigro trivittatus, postice luteum; abdomen luteum, disco nigro; alæ anticæ strigis fuscis, necnon maculis tribus strigisque transversis nigris; posticæ pallide fuscæ, fascia maculari nigro-fusca, margine interiore luteo.

Phægoptera nemophila, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 14, f. 60 (1853).

Brown. Thorax with three black stripes, luteous towards the abdomen. Abdomen luteous; disk black. Fore wings with dark brown longitudinal streaks, with large black spots along the costa, and with three slender transverse black streaks by the middle of the inner border. Hind wings very pale brown, with a macular blackish brown band, luteous along the inner border.

Venezuela.

21. Halesidota specularis.

Fœm. *Cervina; palpi rufi; abdomen rufum, apice album; alæ anticæ fuscescentes, apice margineque exteriore purpureo-rufis, margine interiore testaceo, macula obliqua maxima limpida, costa ex parte flava, basi rufa; posticæ albidæ, apud margines rufæ.*

Phægoptera specularis, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 14, f. 59 (1853).

Female. Fawn-colour. Palpi red. Abdomen red; tip white. Fore wings brownish, pale purplish red at the tips and along part of the exterior border, testaceous along the inner border. Costa red towards the base, yellow opposite a very large limpid oblique spot beyond the middle, and occupying one-third of the surface. Hind wings whitish, pale red along the borders.

Venezuela.

22. Halesidota coprophora.

Mas. *Lutea; thorax vittis duabus obliquis subpurpureis; abdomen apice album; alæ anticæ subpurpureæ; fascia obliqua subapicali pallidiore, costa margineque interiore luteis; posticæ albidæ.*

Phægoptera coprophora, *Moriz, Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 15, f. 62.

Male. Luteous. Thorax with two oblique lilac stripes. Abdomen white at the tip. Fore wings lilac, with an oblique subapical paler band, luteous along the costa and along the inner border. Hind wings whitish.

Venezuela.

23. Halesidota aconia.

Fœm. *Lutea; caput album; thorax fascia vittisque tribus albis; abdomen apice nigro notatum, lateribus vittaque apicali albis; alæ anticæ albido subpurpureæ, fascia albido-testacea obliqua undulata subapicali, margine exteriore testaceo; postice pallidiores, marginibus albis.*

Phægoptera aconia, *Moriz, Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 15, f. 64.

Fem. Luteous. Head white. Thorax with a white band in front and with three white stripes. Abdomen white along each side, with a white stripe at the tip, which is marked with black. Fore wings whitish lilac, testaceous along the exterior border, and with a whitish testaceous oblique undulating subapical band. Hind wings paler whitish lilac, with white borders.

Venezuela.

24. Halesidota suffusa.

Fœm. *Fusca; thorax luteo bivittatus; abdomen luteum, e maculis testaceis nigro marginatis bivittatum; alæ anticæ fasciis quinque undulatis testaceis; posticæ albidæ, cinereo marginatæ.*

Phægoptera suffusa, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 15, f. 67.

Fem. Brown. Thorax with a luteous stripe on each side. Abdomen luteous, with a row of testaceous black-bordered spots along each side. Fore wings with five undulating testaceous bands; third and fourth bands enclosing a rather darker testaceous space, which occupies about one-third of the length of the wing, and includes a brown lunar mark at the tip of the discal areolet; fourth band double, the inner side being brighter than the outer. Hind wings whitish, with gray borders.

Venezuela.

25. Halesidota cornea.

Testacea; alæ albido hyalinæ, marginibus testaceis. Mas.—*Obscurior; abdominis discus rufus; alæ marginibus testaceis latioribus, anticæ striga obliqua albida subapicali.*

Phægoptera cornea, *Moriz. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 14, f. 61, 62 (1853).

Testaceous. Wings whitish hyaline, with testaceous borders. *Male.*—Darker than the female. Disk of the abdomen red. Wings with broad testaceous borders. Fore wings with an oblique whitish subapical streak.

Venezuela.

26. Halesidota thalassina.

Fœm. *Lutea; caput antice album; antennæ ferruginæ; thorax fascia antica vittisque duabus albis; femora subtus alba; alæ virides nigro venosæ, anticæ basi albido-luteæ nigroque guttatæ.*

Phægoptera thalassina, *Boisd. Herr.-Schæff. Lep. Exot. Ser.* 1, pl. 15, f. 66.

Fem. Luteous. Front and face white. Proboscis tawny. Antennæ ferruginous, luteous at the base. Thorax with a white band in front, white about the shoulders, and with two white stripes which diverge hindward. Pectus with a white spot in front.

Femora white beneath. Wings sea-green, minutely squamose; veins black. Fore wings without hairs, except along the cilia, which is testaceous, and at the base, which is whitish and partly luteous, and adorned with five black dots. Hind wings mostly bare, but with testaceous hairs along the hind border, and on one-third of the surface from the inner border. Length of the body 10? lines; of the wings 34 lines.

Venezuela.

a. ———?

27. HALESIDOTA ERIDANUS.

Alba; abdomen fasciis luteis; alæ venosæ.

Phalæna Noctua Eridanus, *Cram. Pap. Exot.* i. 107, pl. 68, f. G.
Hypercompa exsignata Eridane, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Phalænæ*, ii. *Veræ*, vii. *Hypercompæ A. Exsignatæ*, b. f. 1—4.
Ecpantheria Eridane, *Hübn. Verz. Schmett.* 183, 1888.

Surinam.

Country unknown.

28. HALESIDOTA CATENULATA.

Testacea; alæ anticæ strigis plurimis transversis undatis aut semiocellaribus pallide fuscis; posticæ albæ.

Hipocrita glaucopoides catenulata, *Hübn. Samml. Exot. Schmett.* i. *Lep.* ii, *Bomb.* ii. *Veræ*, vi. *Hipocritæ B. Glaucopoides*, a. f. 1—4.
Halesidota catenula, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hipocritæ Sphingiformes*,) 170, 1754.

Nearly allied to *H. annulosa.*

29. HALESIDOTA ATOMOSA.

Fœm. *Testacea; palpi fusco strigati; alæ anticæ guttis sparsis nigricantibus.*

Allied to *H. strigulosa.*

Fem. Testaceous, paler beneath. Proboscis tawny. Palpi with a brown streak on the outer side. Coxæ very pilose. Fore wings thinly and irregularly covered with very minute blackish dots. Hind wings a little paler than the fore wings. Length of the body 6 lines; of the wings 17 lines.

a. ———?

Genus 56. CANOPUS.

Fœm. Corpus subfusiforme. Caput parvum. Proboscis corporis dimidio non longior. Palpi longiusculi, subascendentes; articulus 2us subarcuatus, 1o vix longior; 3us subclavatus, 2o brevior. Antennæ simplices, graciles, corporis dimidio multo longiores. Abdomen alas posticas paullo superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longissimis. Alæ sat longæ et angustæ.

Fem. Body nearly fusiform. Head small. Proboscis about half the length of the body. Palpi rather long, slightly ascending; second joint slightly curved, hardly longer than the first; third subclavate, shorter than the second. Antennæ simple, slender, full three-fourths of the length of the body. Abdomen extending a little beyond the hind wings. Legs rather long and slender; hind tibiæ with four very long spurs. Wings rather long and narrow. Fore wings nearly straight in front; discal fold distinct; first and second inferior veins nearly united at the base; third more than six times further from the fourth than from the second. Hind wings slightly convex in front; their veins like those of the fore wings in structure.

1. Canopus Bubo.

Fœm. *Albus; palpi nigro bifasciati; antennæ nigræ; thorax nigro* 14-*maculatus; abdomen e maculis nigris bivittatum; femora supra lutea, antica apice nigra; tarsi subtus fulvi; alæ anticæ basi nigro triguttatæ.*

Female. White. Proboscis tawny. Palpi with three black bands. Antennæ black, white towards the base. Prothorax with six black spots, two in the disk, and two on each side. Mesothorax with a band of six black spots between the fore wings, and with four spots behind arranged in a square. Abdomen with a row of black spots on each side above and beneath. Femora luteous above; tarsi tawny beneath; anterior femora with black tips. Fore wings with three black dots at each base. Length of the body 9 lines; of the wings 28 lines.

a. Congo. Presented by Sir J. Richardson.

2. Canopus rufifemur.

Fœm. *Albus; palpi nigro trifasciati; antennæ fulvæ; prothorax nigro biguttatus; abdomen e guttis nigris bivittatum; tarsi subtus fulvi; femora antica supra rufa; alæ anticæ ad costam subtestaceæ.*

Female. White. Proboscis and antennæ tawny. Palpi with three black bands on the upper side. Thorax with a slight testaceous tinge on each side. Prothorax with a black dot on each side. Pectus with a black spot on each side. Abdomen with a row of black dots on each side above and beneath. Tarsi tawny beneath; fore coxæ red on the outer side; fore femora red above. Fore wings with a slight testaceous tinge towards the base and along the costa; veins white. Length of the body 5½ lines; of the wings 17 lines.

a. Congo. Presented by Sir J. Richardson.

Genus 57. ANAXITA.

Mas. Proboscis corporis dimidio brevior. Palpi longi, porrecti, filiformes; articulus 2us 1o multo longior; 3us 2i dimidio longior. Antennæ mediocriter pectinatæ, corpore paullo breviores. Abdomen alas posticas vix superans. Sexualia parva. Pedes longiusculi, fere nudi; tibiæ posticæ calcaribus quatuor sat parvis. Alæ longiusculæ.

Male. Proboscis less than half the length of the body. Palpi long, porrect, filiform; second joint very much longer than the first; third more than half the length of the second. Antennæ moderately pectinated, about three-fourths of the length of the body. Abdomen hardly extending beyond the hind wings; sexual appendages small. Legs rather long, almost bare; hind tibiæ with four rather small spurs. Wings rather long. Fore wings slightly convex in front; discal fold indistinct; first and second inferior veins connected at the base; third about four times further from the fourth than from the second. Hind wings with the costal vein commencing at the middle of the areolet; first and second inferior veins contiguous at the base; third about four times further from the fourth than from the second.

1. Anaxita decorata.

Læte rufa; caput et thorax nigro alboque varia; palpi nigri; abdomen vitta dorsali interrupta nigra albido marginata, subtus fasciis nigris-albisque, apice fusco; pedes nigri, albo vittati; alæ anticæ ochraceæ, basi rufæ, albo ex parte marginatæ, macula costali rufa, fasciis duabus discalibus strigisque subapicalibus canis nigro marginatis; posticæ macula discali strigisque apicalibus nigris.

Bright red. Head with a black spot on the vertex, black behind with a white band. Proboscis ferruginous. Palpi black; white beneath, red above at the base. Antennæ black, red at the base. Prothorax and lappets white, the latter in front with black borders, which are streaked with white. Abdomen with a slender dorsal interrupted black whitish-bordered stripe; tip brown; under side with alternate black and white bands, the white bands very broad towards the base. Legs black, streaked with white. Wings ochraceous, red at the base; most of the fore border, and a small part of the hind border white; a red spot on the fore border beyond the middle; a basal mark, two discal bands, and a row of subapical streaks hoary, with black borders; first band nearly straight, not far from the base of the wing; second angular in the middle; streaks interlined with black. Hind wings with a black discal spot near the fore border, and a row of apical black streaks. Length of the body 9 lines; of the wings 30 lines.

a. Mexico. Presented by E. Doubleday, Esq.
b. Mexico. From M. Hartweg's collection.

Genus 58. ONYTHES.

Mas. Corpus longiusculum, sat robustum. Proboscis longa. Palpi longiusculi, validi, ascendentes; articulus 2us 1o valde longior; 3us parvus conicus. Antennæ subpectinatæ, corpore paullo breviores. Abdomen alas posticas triente superans. Pedes sat validi, femora basi coxæque pilosa; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longiusculæ, sat angustæ.

Male. Allied to the *Noctuites*. Body moderately stout, rather long. Proboscis long. Palpi stout, ascending, rather long; second joint very much longer than the first; third small, conical. Antennæ slightly pectinated, three-fourths of the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs rather stout; femora towards the base and coxæ hairy; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Fore wings with the first inferior vein nearly contiguous to the second at the base; third full twice further from the fourth than from the second.

1. ONYTHES PALLIDICOSTA.

Mas. *Fuscus; caput et pectus fulva; palpi nigro-fusci; antennæ nigræ; thorax fulvo univittatus; abdomen maculis lateralibus ventreque luteis; femora basi subtus coxæque fulva; tarsorum articuli apice albidi; alæ anticæ apud costam fulvæ.*

Male. Brown. Head and pectus tawny. Proboscis ferruginous. Palpi blackish brown. Antennæ black. Thorax with a tawny dorsal stripe, and on each shoulder with a whitish tuft. Abdomen with a row of luteous spots on each side above; disk of the under side luteous. Femora towards the base beneath and coxæ tawny; tips of the joints of the tarsi whitish. Fore wings tawny along the costa, which is whitish; veins partly tawny. Hind wings grayish beneath. Length of the body 7 lines; of the wings 20 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 59. AMBRYLLIS.

Mas. Proboscis corporis dimidio multo brevior. Palpi ascendentes, breves; articulus 3us conicus, minimus. Antennæ mediocriter pectinatæ, corporis dimidio longiores. Abdomen alas posticas superans. Forceps analis longus, gracilis. Pedes mediocriter longi; tibiæ posticæ calcaribus quatuor brevisculis. Alæ mediocriter latæ, subnudæ, sublimpidæ; anticæ maculatæ.

Glaucopis, p., *Van der Hœven.*

Male. Proboscis rather short, much less than half the length of the body. Palpi ascending, short; third joint conical, very small. Antennæ pectinated, more than half the length of the body; branches short. Thorax not crested. Abdomen extending beyond the hind wings. Sexual appendages with long and slender forceps. Legs of moderate length; fore tibiæ with an apical spur; hind tibiæ with four rather short spurs. Wings of moderate breadth, nearly bare and limpid. Fore wings with two superior veins; discal fold indistinct; second inferior vein as far from the first as from the third, which is full six times further from the fourth than from the second. Hind wings with two superior veins; costal (eighth, *Herr.-Schæff.*) springing from near the base of the subcostal; third inferior almost contiguous to the second at the base, about six times nearer to the first than the fourth.

1. AMBRYLLIS BOISDUVALII.

Mas. *Nigra; thorax antice albo fasciatus; abdomen album, guttis posticis apiceque nigris; tarsi antici albo cincti; alæ sublimpidæ, anticæ costa nigra maculisque quatuor coccineis nigro marginatis.*

Glaucopis Boisduvalii, *Van der Hœven, Tidschrift.*

Head, proboscis, palpi and antennæ black. Thorax black, with a very broad white curved band in front. Abdomen white; apical half with a row of black dots; tip black, with a tuft of luteous hairs; under side with two lateral rows of black dots; appendages ferruginous. Legs black; fore tarsi with white bands. Wings nearly limpid; veins white. Fore wings with a black costa and with four crimson black-bordered spots; first in the discal areolet; second partly in the discal areolet, partly beyond; third by the internal angle; fourth at the tip. Length of the body 7—8 lines; of the wings 20—22 lines.

a. Venezuela. From Mr. Dyson's collection.
b. ——— ? From Mr. Milne's collection.

Genus 60. ANAPHELA.

Mas. Corpus gracile, sublineare. Caput et thorax dense fasciculata. Proboscis brevis. Palpi pilosi, breves; articulus 3us minimus. Antennæ serratæ. Abdomen lineare, alas posticas paullo superans, apice forcipatum. Pedes sat validi; tibiæ posticæ calcaribus mediocriter longis. Alæ anticæ latæ, subtrigonæ; posticæ anticis latiores.

Anaphela, *Boisd.*

Male. Body slender, nearly linear. Head and thorax thickly tufted with hairs. Proboscis short. Palpi hairy, short; third joint very small. Antennæ serrated. Abdomen linear, extending a little beyond the hind wings; tip forcipated. Fore wings broad, subtriangular, straight along the costa; outer border oblique and convex, forming a slight curve and not an angle with the hind border; first, second and third inferior veins approximate; fourth about twice further from the third than the third from the first. Hind wings broader than the fore wings and nearly two-thirds of their length. Legs moderately stout; fore tibiæ dentated beneath; hind tibiæ with four spurs of moderate length.

1. Anaphela luctifera.

Atra; caput, thoracis macula postica, abdominis vitta interrupta, alæque posticæ rufa; alæ anticæ maculis tribus (una basali duabusque discalibus) fasciaque e guttis subapicali flavo-albis; posticæ basi margineque postico nigris.

Anaphela luctifera, *Boisd.*

Deep black. Head red. Thorax with a red spot behind; pectus red in front. Abdomen red above, with the exception of the base and the fore border of each segment. Fore wings with yellowish white marks, which consist of a spot near the base, a larger one in the disk, and a third beyond still larger and contracted in the middle, and an undulating band of dots near the tip. Hind wings red, black at the base and along the hind border. Length of the body 7 lines; of the wings 18—20 lines.

a. ——— ? Presented by E. Doubleday, Esq.
b, c. Madagascar. From M. Becker's collection.

Genus 61. SCIATHOS.

Corpus sat robustum. Proboscis brevis. Palpi brevissimi; articulus 3us minimus. Pedes sat validi; tibiæ posticæ calcaribus apicalibus minutis. *Mas.*—Antennæ late pectinatæ. Abdomen alas posticas paullo superans. Alæ sat angustæ. *Fœm.*—Antennæ mediocriter pectinatæ. Abdomen alas posticas non superans. Alæ mediocriter latæ.

Body moderately stout. Proboscis short. Palpi very short; third joint very small. Legs rather stout; hind tibiæ with minute apical spurs. Fore wings with the first and second inferior veins unusually remote from each other; second twice further from the third than from the first; third a little further from the fourth than from the second. *Male.*—Antennæ rather deeply pectinated. Abdomen extending for about one-fourth of its length beyond the hind wings. Wings rather narrow. *Female.*—Antennæ moderately pectinated. Abdomen not extending beyond the hind wings. Wings moderately broad.

1. SCIATHOS PUNCTIGER.

Mas et fœm. *Albus; caput rufum; antennæ nigræ; thorax margine antico maculisque sex rufis; pectus et abdomen rufa; pedes nigri, coxis femoribusque rufis; alæ anticæ fascia maculari, ad costam rufæ; posticæ rufæ.*

Phalæna Bombyx punctigera, *Cram. Pap. Exot.* v. 151, pl. 34, f. 1.

Male and fem. White. Head bright red. Antennæ black. Thorax bright red in front, and with six dorsal bright red spots, three on each side. Pectus and abdomen bright red. Legs black;

coxæ and femora red. Fore wings with a red tinge, and with an oblique middle band of black dots; costa bright red, white behind. Hind wings bright red. Length of the body 6—7 lines; of the wings 14—22 lines.

a, *b*. Brazil. Presented by E. Doubleday, Esq.
c. ———?

Genus 62. OVIOS.

Corpus sat gracile. Proboscis capitis latitudine multo longior. Palpi pilosi, porrecti, longiusculi; articulus 2us 1o longior; 3us conicus, parvus. Abdomen alas posticas paullo superans. Pedes pilosi; tibiæ posticæ calcaribus quatuor longissimis. Alæ latæ. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ graciles, simplices.

Allied to *Erastria* and to other *Noctuites*.

Body rather slender. Proboscis much longer than the breadth of the head. Palpi hairy, porrect, rather long; second joint longer than the first; third conical, small. Abdomen extending a little beyond the hind wings. Legs hairy; hind tibiæ with four very long spurs. Wings broad. Fore wings with the second inferior vein as near to the third as to the first; third about four times further from the fourth than from the second. Hind wings with the costal vein springing from near the base of the wing. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ slender, simple.

1. Ovios capensis.

Mas et fœm. *Alba, subtus lutea; caput nigro trifasciatum; palpi nigri, albo fasciati, subtus lutei; antennæ nigræ; thorax luteo quadrimaculatus, nigro bifasciatus; abdomen maculis dorsalibus nigris; pedes lutei, tarsis nigris albo fasciatis; alæ anticæ testaceæ, marginibus nigris albo conspersis dein et ex parte rufo limbatis, disco apicem versus viridescente, macula nigra discali albo marginata, maculis tribus subcostalibus unaque postica marginali rufis; posticæ testaceæ, macula arcuata discali fasciaque maculari submarginali nigris.*

Eudryas? capensis, *Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 115, 116.

Male and fem. Head and thorax white above, luteous beneath. Head with two black bands in front of the antennæ and one

behind. Proboscis tawny. Palpi black above, with a white band, luteous beneath. Antennæ black. Thorax with two luteous spots on each side, and with two black bands. Pectus with luteous hairs. Abdomen with a dorsal row of black spots. Legs luteous; tarsi black, with white bands; fore tibiæ with a thick tuft of white hairs. Fore wings testaceous; border mostly black, powdered with white, edged within with white, and about the tips without also with red; disk beyond the middle with a green tinge; a black discal white-bordered spot; three red subcostal spots, and one red posterior marginal spot; under side testaceous, with two black spots and a black band. Hind wings testaceous, with a lunar discal black spot, and a macular submarginal black band. Length of the body 8 lines; of the wings 18 lines.

a. South Africa. Presented by Dr. A. Smith.
b. Port Natal. From M. Gueinzius' collection.

2. Ovios Sylvina.

Mas. et fœm. *Cinerea; caput nigricans, luteo bimaculatum; palpi lutei, vitta nigra; antennæ nigræ; thorax luteo sex maculatus; abdominis segmenta luteo fasciata; pedes luteo fasciati; alæ anticæ argenteo-albidæ, fasciis tribus angulosis nigris maculaque discali nigro ex parte marginata rufa, apice, margine postico discoque ex parte fusco-cinereis; posticæ pallide fuscæ, fascia discali obscuriore.*

Phalæna Noctua Sylvina, *Stoll. Suppl. Cram. Pap. Exot.* 174, pl. 40, f. 4.

Male and fem. Gray. Head blackish, with a luteous spot on each side. Proboscis tawny. Palpi luteous, with a black stripe above. Antennæ black, testaceous at the base. Thorax with three luteous spots on each side. Abdomen with luteous bands on the hind borders of the segments. Legs with luteous bands. Fore wings silvery whitish, brownish gray at the tips, along the hind border, and on part of the disk, adorned with three zigzag black bands, and with a red lunate discal spot, which is partly bordered with black; cilia alternately luteous and gray; under side pale shining brown. Hind wings pale shining brown, with a brown discal band, which is much more apparent beneath, where the wings are whitish with brown borders; cilia white. *Female.*—Band of the hind wings not apparent above. Length of the body 6—8 lines; of the wings 18—20 lines.

Var. β. Male. Thorax white in front.

a. Caffraria. From M. Becker's collection.
b, *c*. South Africa. From Mr. Argent's collection.
d. Port Natal. From M. Gueinzius' collection.

Genus 63. EGYBOLIA.

Corpus sat validum. Proboscis longa. Palpi prominuli, porrecti, capitis latitudine multo longiores; articulus 2us 1o triplo longior; 3us gracilis, cylindricus, 2i dimidio æqualis. Thorax plumis latis vestitus. Abdomen alas posticas non superans. Pedes longiusculi, sat validi; tibiæ posticæ calcaribus quatuor longissimis. Alæ squamosæ, latissimæ. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Phalæna, p., *Stoll.*
Egybolia, *Boisd.*
Caloptera, *Blanchard.*

Allied to *Ophiusa*, a genus of *Noctuites*. Body moderately stout. Proboscis long. Palpi prominent, porrect, much longer than the breadth of the head; second joint thrice the length of the first; third slender, cylindrical, about half the length of the second. Thorax clothed with broad plumes. Abdomen extending as far as the hind wings. Legs rather long and stout; hind tibiæ with four very long spurs. Wings very broad, squamose. Fore wings with the second inferior vein as far from the first as from the third; third about four times further from the fourth than from the second. *Male.* — Antennæ moderately pectinated. *Female.* — Antennæ simple.

1. Egybolia Vaillantina.

Cyaneo-viridis; caput, palpi, antennæ, tibiæ anticæ omnino et posteriores apice ochracea; alæ latæ, anticæ fasciis duabus nigris, fasciaque lata basali maculisque duabus anticis guttaque postica nonnunquam obsoleta ochraceis; alæ posticæ nigræ, apice margineque postico cyaneo-viridibus.

Phalæna Vaillantina, *Stoll. Suppl. Cram. Pap. Exot.* v. 142, pl. 31, f. 3.
Caloptera formosa, *Blanchard, Hist. Ins.* pl. 17, f. 6.
Egybolia Vaillantiana, *Boisd. Voy. de Delagorgue.*
——— ———, *Angas, Kaffirs, Illustrated*, pl. 30, f. 19.

a, *b*. Port Natal. From Dr. Krauss' collection.
c, *d*. Port Natal. From M. Gueinzius' collection.
e. Zoolu Country. Presented by G. F. Angas, Esq.
f. South Africa. From M. Becker's collection.

Genus 64. APINA.

Corpus mediocriter robustum. Proboscis longiuscula. Palpi porrecti, pilosi, breviusculi; articulus 2us lo multo longior; 3us lanceolatus, minutus. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longissimis. Alæ latæ. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Body moderately stout. Proboscis rather long. Palpi porrect, hairy, rather short; second joint much longer than the first; third lanceolate, minute. Abdomen extending as far as the hind wings. Legs rather stout; hind tibiæ with four very long spurs. Wings broad. Fore wings with the first and second inferior veins near together at the base; third about six times further from the fourth than from the second. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ simple.

1. Apina Callisto.

Nigra; caput flavum; thorax flavo quadrivittatus; abdominis segmenta luteo vittata; pedes luteo hirti, tarsorum articulis apice albis; alæ nigro-fuscæ, marginibus anticis flavo guttatis; anticæ ferrugineo vittatæ, flavo conspersæ flavoque trifasciatæ; posticæ fascia lata arcuata discali flava.

Agarista? Callisto, *Doubleday MSS.*

Black. Head clothed with yellow hairs. Proboscis tawny. Antennæ white towards the tips. Thorax with four yellow stripes, the inner pair abbreviated. Abdomen with a luteous band on the hind border of each segment; these bands are paler beneath, especially in the male; tip luteous. Legs clothed with luteous hairs; tarsi with a white band on the tip of each joint. Wings blackish brown, with yellow dots along the borders. Fore wings with ferruginous stripes, sprinkled with yellow, and adorned with three yellow bands, the first indistinct, the second interrupted or abbreviated, the third broader and generally entire. Hind wings with a broad curved yellow discal band. Length of the body 7—9 lines; of the wings 22—24 lines.

a, *b*. Australia. Presented by J. G. Children, Esq.
c. Australia. Presented by the late Earl of Derby.
d. Australia.
e. Moreton Bay. From Capt. Parry's collection.
f. Van Dieman's Land. From Mr. A. J. Smith's collection.

2. APINA FEISTHAMELII.

Nigra; palpi flavi, nigro fasciati; thorax flavo vittatus; abdomen ochraceo fasciatum; femora ochraceo hirta; tibiæ tarsique albo fasciata; alæ anticæ flavo conspersæ et trifasciatæ, apice flavo guttatæ; posticæ flavæ, nigro marginatæ.

Agarista Feisthamelii, *Boisd.*

Black. Head and thorax of the male thickly clothed with black hairs. Head of the female partly clothed with pale yellow hairs. Palpi pale yellow, with a black band. Thorax of the male with two indistinct yellowish stripes, of the female with four pale yellow stripes, the middle pair very short. Abdomen with a tuft of orange hairs at the base, and with two orange bands near the tip, which is orange. Femora clothed with orange hairs; tibiæ and tarsi with white bands. Fore wings sprinkled with pale yellow, with a row of pale yellow dots along the tips, and with three pale yellow bands in the disk; first and second bands shortened hindward; third curved inward towards the hind border; the three bands sometimes connected together behind. Hind wings pale yellow, black towards the base, and with black borders. Length of the body 6—7 lines; of the wings 16—20 lines.

a. Van Dieman's Land. Presented by R. Butler, Esq.
b—d. Presented by J. G. Children, Esq.

3. APINA ANGASII.

Nigro-fusca; caput roseo bimaculatum; palpi rosei, antennæ luteæ; thorax roseo vittatus; abdomen et pedes albo fasciata; alæ anticæ albo conspersæ et maculatæ et bifasciatæ, maculis exterioribus roseis; posticæ albo ciliatæ.

——— Angasii, *Doubleday MSS.*

Blackish brown. Head with a rose-coloured spot on each side. Palpi rosy. Antennæ luteous. Thorax with some white plumes in front and on each side, and with an interrupted stripe of rosy plumes. Abdomen and legs with white bands. Fore wings powdered with white, and with three white spots in the disk; a white band near the base, and another near the tip; a row of rosy dots along the exterior border, and some white spots between them and the outer band. Hind wings fringed with white. Length of the body 6 lines; of the wings 18 lines.

a, b. Australia. Presented by F. G. Angas, Esq.

Genus 65. ARE.

Mas. Corpus sublineare, subcylindricum, mediocriter longum et gracile. Proboscis corporis dimidio multo brevior. Palpi porrecti, pilosi, longiusculi; articulus 2us 1o multo longior; 3us longiconicus, 2i dimidio brevior. Antennæ sat late pectinatæ. Pedes breviusculi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ latissimæ, non longæ; posticæ alas posticas vix superantes.

Male. Body rather slender. Proboscis about as long as the breadth of the head. Palpi porrect, rather long; second joint much longer than the first; third almost cylindrical, nearly half the length of the second. Antennæ moderately pectinated. Legs moderately stout; hind tibiæ with two rather small apical spurs. Wings very broad. Fore wings with the second inferior vein a little nearer to the first than to the third; third about four times further from the fourth than from the second.

1. ARE MARGINATA.

Alæ anticæ fusco-nigræ, margine antico baseos luteo; posticæ atræ basi macula discali, punctisque marginalibus, cærulescente-albis; abdomen apice luteum.

Phalæna (Bombyx) marginata, *Drury, Ins. Exot.* ii. 38, pl. 22, f. 2. *Drury, App.* ii.

Callimorpha? marginata, *Westw. ed. Drury,* ii. 40, pl. 22, f. 2.

Dark brown. Palpi and antennæ black. Thorax with a luteous band in front. Abdomen luteous at the tip. Fore wings with a testaceous stripe along the basal half of the costa, and beyond the middle with a broad reddish band, which is forked in front. Hind wings with a whitish band near the base; a whitish spot in the fore part of the disk, and a row of whitish marginal dots.

a—c. Jamaica. From Mr. Children's collection.
d. ———?

2. ARE? MUMMIA.

Nigro-fusca; alæ anticæ linea submarginali guttisque subapicalibus obscurioribus, posticæ macula maxima basali oblonga cyanescente hyalina.

Phalæna Mummia, *Cram. Pap. Exot.* iii. 61, pl. 228, f. c.

Surinam.

Genus 66. AMMATHO.

Fem. Corpus sat breve. Proboscis corporis dimidio vix brevior. Palpi ascendentes, mediocriter longi; articulus 2us 1o multo longior; 3us conicus, minimus. Antennæ graciles, simplices, subserratæ. Abdomen alas posticas non superans. Pedes mediocriter longi et validi; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter longæ latæque; anticæ costa convexa.

Allied to the *Lithosiidæ*. *Female.* Body rather short. Proboscis nearly half the length of the body. Palpi of moderate length, ascending; second joint much longer than the first; third conical, very minute. Antennæ slender, simple, minutely serrated. Abdomen not extending beyond the hind wings. Legs moderately long and stout; hind tibiæ with four small spurs. Wings moderately long and broad; fore border convex; anterior border very oblique; discal fold distinct along its whole length; second inferior vein a little nearer to the third than to the first; third full six times further from the fourth than from the second. Hind wings with the first, second and third inferior veins united at the base; fourth remote.

1. AMMATHO FIGURATUS.

Fœm. *Pallide rufus; thorax nigro bimaculatus; alæ anticæ costa fasciaque tribus nigris, 1a angulosa et ramosa, 2a recta, 3a arcuata radiosque emittente.*

Female. Pale red. Thorax with a small black spot on each side of the disk. Tibiæ with black tips. Fore wings with a black costa and a black cilia, and at one-third of the length with a zigzag black band, which emits two branches to the base; a black straight oblique band in the middle, connected at each end with a semicircular black band, which emits seven black radii towards the inner border; under side and hind wings pale red, blackish towards the tips. Length of the body 4 lines; of the wings 14 lines.

a. North China. From Mr. Cuming's collection.

2. AMMATHO CUNEONOTATUS.

Fœm. *Pallide rufus; caput nigro uniguttatum; thorax maculis cinereis flavo marginatis; alæ anticæ cinereæ maculis plurimis rufis flavo marginatis duabusque flavis rufo notatis; posticæ semihyalinæ.*

Female. Pale red. Head with a black dot on the vertex. Proboscis piceous. Thorax with gray yellow-bordered spots. Fore wings gray, with many mostly cuneiform red yellow-bordered spots, and with two large yellow red-marked spots, one on the disk, the other on the inner border. Hind wings semihyaline. Length of the body 5 lines; of the wings 15 lines.

a. Ceylon. Presented by R. Templeton, Esq.

3. AMMATHO LINEATUS.

Fœm. *Ochraceus; alæ anticæ fusco marginatæ bifasciatæ et apices versus univittatæ, posticæ luteæ fusco marginatæ.*

Fem. Orange. Proboscis and antennæ tawny, the latter orange towards the base. Thorax with a brown dot on each side by the fore wing. Fore wings bordered with brown; two brown bands, one before the middle and nearly straight, the other beyond the middle and much curved outward; a short brown stripe proceeding from the latter to the middle of the exterior border. Hind wings luteous, with broad brown borders. Length of the body 4½ lines; of the wings 14 lines.

a. Sumatra. From Sir Stamford Raffles' collection.

Genus 67. SARAPUS.

Mas. Corpus robustum. Caput et thorax pilis longis densissime hirta. Proboscis brevissima. Palpi breves, pilosissimi; articulus 2us 1o multo longior; 3us minutus, conicus. Antennæ late pectinatæ. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ.

Male. Body stout. Head and thorax very thickly clothed with long hairs. Proboscis very short. Palpi short, very pilose; second joint much longer than the first; third minute, conical. Antennæ deeply pectinated, full half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four small spurs. Wings moderately broad. Fore wings with the first and second inferior veins nearly contiguous at the base; third more than twice further from the fourth than from the second.

1. SARAPUS BICOLOR.

Mas. *Cervinus; antennæ albidæ, ramis fuscis; alæ anticæ costa testacea; posticæ albæ, apice testaceæ.*

Fawn-colour. Antennæ whitish, with brown branches. Costa of the fore wings testaceous. Hind wings white; their tips testaceous. Length of the body 7 lines; of the wings 16 lines.

a. Cape. From M. Dregé's collection.
b. ——— ?

Genus 68. PINARA.

Fœm. Corpus validum, dense pilosum. Proboscis brevissima. Palpi breves, valde pilosi; articulus 3us obtusus, minimus. Antennæ filiformes, thorace multo breviores, apice obtusæ, apices versus subtus subserratæ. Abdomen alas posticas non superans. Pedes validi; femora et tibiæ late ciliata; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ longiusculæ, non latæ.

Female. Body stout, thickly clothed with hairs. Proboscis very short. Palpi short, very pilose; third joint obtuse, very small. Antennæ filiform, much shorter than the thorax, somewhat obtuse at the tips, minutely serrated beneath towards the tips. Abdomen not extending beyond the hind wings. Legs stout; femora and tibiæ with long hairs; hind tibiæ with two minute apical spines. Wings rather long, not broad. Fore wings with the second vein full four times further from the third than from the first; third about twice further from the fourth than from the second.

This genus has some resemblance to the *Liparidæ*, and the structure of its antennæ at once distinguishes it from all the other *Arctiidæ*.

1. PINARA CANA.

Fœm. *Cano-alba; palpi et antennæ nigra; tarsi nigri, albocincti; alæ anticæ subcinereæ, fascia una obscuriore duabusque albidis, fasciaque perobliqua subundulosa e guttis nigris luteo extus marginatis.*

Fem. Hoary white. Palpi and antennæ black. Tarsi black, with white bands. Fore wings grayish in front, with one darker gray and two whitish bands; the gray and the first whitish band before the middle, the second whitish band at two-thirds of the

length; a little beyond it there is a very oblique slightly undulating band of black dots, which have luteous borders on the fore side. Length of the body 6—9 lines; of the wings 18—32 lines.

a—d. Van Dieman's Land. Presented by Morton Allport, Esq.
e, f. Australia. Presented by H. G. Harrington, Esq.
g. Van Dieman's Land. Presented by — Walcott, Esq.
h—j. Van Dieman's Land. Presented by W. C. Hewitson, Esq.
k. Australia. Presented by the late Earl of Derby.
l. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.

ADDENDA

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Genus TRICHOSOMA.

Trichosoma, *Ramb.*; *Duponch.*; *Blanch.*; *Lucas.*
Arctia, p., *Schr.*

1. Trichosoma parasitum.

Arctia parasita, *Schr. Faun. Boic.* ii. 152.
Trichosoma parasitum, *Blanch. Hist. Nat. Ins.* iii. 487.
Trichosoma parasita, *Lucas, Ann. Soc. Ent. Fr.* 3*me Sér.* i. 403, 3.

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2. Trichosoma corsicum.

Trichosoma corsicum, *Duponch. Hist. Nat. Lép. France, Suppl.* iii. 61, pl. 4, f. 6. *Lucas, Ann. Soc. Ent. Fr.* 3*me Sér.* i. 397, 1.

3. Trichosoma Bœticum.

Trichosoma Bœticum, *Duponch. Hist. Nat. Lép. France, Suppl.* iii. 64, pl. 4, f. 7. *Ramb. Faune Ent. Andal.* ii. pl. 14, f. 1—4. *Lucas, Ann. Soc. Ent. Fr.* 3*me Sér.* i. 400, 2.

4. Trichosoma mauritanicum.

Trichosoma mauritanicum, *Lucas, Ann. Soc. Ent. Fr.* 3*me Sér.* 414, 7.

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5. Trichosoma algiricum.

Trichosoma algiricum, *Lucas, Ann. Soc. Ent. Fr.* 3*me Sér.* i. 415, 8.

9. Trichosoma hemigeneum.

Trichosoma hemigeneum, *Lucas, Ann. Soc. Ent. Fr. 3me Sér.* i. 405, 4.

Arctia hemigena, *Cat. Lep. Het.*

10. Trichosoma pudens.

Mas. *Caput et thorax piloso rosacea; antennæ nigræ, supra rubescentes; abdomen rubescente pilosum, supra nigro maculatum; alæ cinereo-rosaceæ; anticæ ad marginem nigro trimaculatæ, lineis duabus transversis nigricantibus vix conspicuis; posticæ cinerascentes, subdiaphanæ, venulis rosaceis, lunula centrali punctisque marginalibus nigricantibus vix conspicuis.*

Trichosoma pudens, *Lucas, Ann. Soc. Ent. Fr. 3me Sér.* i. 410, 5, pl. 13, No. 2, f. 1.

Andalusia.

11. Trichosoma Atlanticum.

Mas. *Caput et thorax cinereo-castaneo pilosa; antennæ nigricantes, supra flavescente tinctæ; abdomen nigrum, fulvo pilosum; alæ anticæ cinereo castaneæ, ad marginem transversim flavescentes trimaculatæ, maculis angustis fusco circum cinctis, postice extusque flavescente lineatæ; posticæ flavæ late nigro limbatæ, limbo postice profundeque emarginato, lunula centrali lineisque duabus nigris.*

Trichosoma Atlanticum, *Lucas, Ann. Soc. Ent. Fr. 3me Sér.* i. 412, 6, pl. 13, No. 2, f. 2.

Algeria.

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Genus TAXILA.

Fœm. Caput, thorax et pectus longe pilosa. Proboscis brevis. Palpi hirti, ascendentes, capite breviores; articulus 3us minimus. Antennæ mediocriter pectinatæ. Abdomen alas perpaullo superans. Alæ anticæ subtrigonæ, hyalino notatæ; posticæ semihyalinæ, marginibus opacis.

Fem. Head, thorax and pectus thickly clothed with rather long hairs. Proboscis short. Palpi hairy, ascending, shorter than the head; third joint very small. Antennæ moderately pectinated. Abdomen extending very little beyond the hind wings; its hairs short and lying flat and smooth. Fore wings nearly triangular,

straight along the costa, with semitransparent marks; outer borders very oblique, convex in the middle; hind-angle rounded; first and second inferior veins almost close together at the base; fourth about eight times further from the fourth than from the second. Hind wings semitransparent, with opaque borders.

1. TAXILA CRUCIFERA.

Fusca; antennæ nigræ; thorax fascia antica arcuata flava; abdominis segmenta fasciis interruptis viridi-flavis; apex luteus; alæ anticæ rufo notatæ, vittaque discali fasciaque subapicali obliqua albis, semihyalinis; posticæ albæ, semihyalinæ, margine fusco rufonotato.

Chelonia crucifera, *Perty, Del. Anim. Artic. Bras.* 160, pl. 32, f. 4.

Brown. Antennæ black. Thorax with a curved pale yellow band in front. Abdomen with an interrupted pale greenish yellow band on each segment; tip luteous. Fore wings with a white semitransparent discal stripe, and with an oblique subapical band of the same colour; some red marks at the base, most apparent beneath, as is a curved red streak near the hind angle. Hind wings semi-transparent, with a bright red brown-bordered margin, which is accompanied by some white dots along its outer side. Length of the body 7 lines; of the wings 18 lines

a. Venezuela. From Mr. Dyson's collection.

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Genus ARCTIA.

43. ARCTIA? DIVISA.

Mas. *Testacea; abdomen supra rufescens, e maculis nigris bivittatum; alæ anticæ rufo notatæ; posticæ rufæ, flavo notatæ.*

Male. Testaceous. Palpi extending a little beyond the head; first joint very short; second very long; third very minute. Antennæ moderately pectinated. Abdomen extending a little beyond the hind wings; reddish above, with a row of black spots along each side. Hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings with some red marks, which are most prevalent beneath. Hind wings red, with a few yellow marks; under side pale yellow, with a small red spot in the disk, and a larger one by the interior border. Length of the body 8 lines; of the wings 22 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

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Genus SPILOSOMA.

Spilosoma hæmorrhoidalis.

Mas. *Roseo-alba; caput et thorax antice coccinea aut lutea; abdomen coccineum aut luteum, albo varium; alæ anticæ ad costam luteæ, fascia obliqua guttulari nigra; posticæ roseæ aut flavescentes.*

Male. White, with a very slight rosy tinge. Head and fore part of the thorax crimson. Antennæ black. Pectus and abdomen bright rose-colour, the latter white at the tip, and partly white beneath. Legs black, with rosy hairs; posterior femora and tibiæ mostly clothed with white hairs. Fore wings luteous along the costa, and with an oblique band of black dots, which extends from half the length of the interior border to beyond two-thirds of the length of the costa; under side rosy. Hind wings rosy, with yellowish borders. Length of the body 6—6½ lines; of the wings 14—15 lines.

Var. β. Head and fore part of the thorax luteous. Abdomen luteous, mostly whitish beneath. Hind wings with a slight pale yellowish tinge.

Rio Janeiro. In Mr. Fry's collection.

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3. Cycnia sordida.

a, *b*. Europe. From M. Becker's collection.

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Genus ANTHEUA.

3. Antheua varia.

Mas et fœm. *Læte flava; caput antice luteum; palpi, pectus et pedes nigra; abdomen luteum, vittis duabus macularibus basi ventreque nigricantibus; alæ anticæ macula discali atomaria nigra, subtus posticæque nigricantes.*

Male. Antennæ pectinated; the branches short.

Male and female. Bright yellow. Head luteous in front. Palpi, pectus and legs blackish. Antennæ tawny. Abdomen luteous, with a row of blackish spots along each side, blackish at the base and beneath. Fore wings with a spot of black flecks in the middle of the disk, blackish beneath. Hind wings blackish. Length of the body 8—9 lines; of the wings 18—21 lines.

a. Port Natal. From M. Gueinzius' collection.

4. ANTHEUA DISCALIS.

Mas et fœm. *Lutea; caput disco albido; abdomen e maculis nigris bivittatum, apice subtusque albidum; alæ anticæ macula discali rufescente atomisque nonnullis nigris; posticæ maris albidæ, fœminæ fuscescentes.*

Luteous. Head whitish on the disk. Abdomen whitish towards the tip and beneath, with a row of black spots on each side above and another beneath. Fore wings with some black flecks, and with an oblong dull pale reddish discal spot; exterior border brownish. *Male.*—Thorax partly yellow. Fore wings with very few black flecks, whitish beneath. Hind wings whitish. *Female.*—Fore wings with the brown border much more distinct than in the male, brownish beneath. Hind wings brownish. Length of the body 6—8 lines; of the wings 14—18 lines.

a—c. North India. From Mr. L. James' collection.
d. North India. Presented by W. W. Saunders, Esq.
e. East Indies. From Archdeacon Clerk's collection.
f. ———? From Mr. Milne's collection.
g, h. North India. From Mr. Stevens' collection.

5. ANTHEUA CINEREA.

Mas. *Pallide cinerea; caput et thorax antice flava; palpi flavi, supra nigricantes; abdomen supra rufo-fulvum, vittis duabus macularibus, fasciisque tribus interruptis nigris; alæ anticæ strigis nonnullis flavescentibus.*

Male. Pale grayish. Head and thorax in front yellow. Proboscis ferruginous. Palpi yellow, blackish above. Antennæ tawny. Abdomen reddish tawny on the disk above, with a row of black spots along each side, and with three interrupted black bands. Wings rather darker beneath than above. Fore wings with some indistinct pale yellowish streaks. Length of the body 9 lines; of the wings 21 lines.

a. West Africa. Presented by E. Doubleday, Esq.
b. Sierra Leone. Presented by the Rev. D. F. Morgan.

6. ANTHEUA ANGUSTIPENNIS.

Mas. *Rufo-fulva; abdomen pallide fulvum albido fasciatum; alæ pallide cervinæ, anticæ angustæ strigis duabus atomosis nigris.*

Male. Reddish tawny. Antennæ whitish cinereous, with black branches. Dorsal disk of the abdomen pale tawny, with a whitish band on the hind border of each segment. Wings pale fawn-colour. Fore wings very narrow and with the angles much rounded; a character which distinguishes this from all the other species of the genus; two streaks of black flecks, one on the disk, the other near the interior border. Length of the body 7½ lines; of the wings 18 lines.

a. Cape. From M. Dregé's collection.

Genus POLYMONA.

In the 'Synopsis' (page 586) this genus will come next to *Sciathos*, from which it may be thus distinguished:—

Tibiæ posticæ calcaribus apicalibus parvis.—SCIATHOS.
Tibiæ posticæ calcaribus apicalibus longis.—POLYMONA.

It is allied to *Antheua*, and seems also to have affinities with the *Liparidæ* and with the *Noctuites*.

Mas. Corpus sat robustum. Caput et thorax pilosissima. Proboscis brevissima. Palpi pilosissimi, mediocriter longi; articulus 1us brevis; 3us parvus, acuto-conicus. Antennæ latissime pectinatæ, thorace paullo longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus apicalibus longiusculis. Alæ mediocriter latæ.

Male. Body rather stout. Head and thorax very pilose. Proboscis very short. Palpi moderately long, very pilose; first joint short; third small, acute-conical. Antennæ very deeply pectinated, a little longer than the thorax. Abdomen hardly extending beyond the hind wings. Legs stout; femora and tibiæ with long hairs; hind tibiæ with rather long apical spurs. Wings moderately broad. Fore wings straight along the costa, somewhat rounded at the tips and on the interior angle, oblique along the exterior borders; second inferior vein a little nearer to the first than to the third; third more than thrice further from the fourth than from the second.

1. POLYMONA RUFIFEMUR.

Mas. *Nigra; caput postice rufum; abdomen supra rufum, vittis tribus maculatibus apiceque nigris; femora rufa; alæ anticæ apud venas rufo notatæ; posticæ albæ.*

Male. Black. Head red behind. Abdomen red above, with three rows of black spots; tip black. Femora red. Fore wings

with a few red marks on the veins. Hind wings white, with a small blackish mark by the interior angle. Length of the body 7 lines; of the wings 18 lines.

a. Interior of South Africa. Presented by the late Earl of Derby.

Genus METARCTIA.

This genus and *Polymona* are distinguished by the same characters from *Sciathos*, and the structure of *Polymona* is very different from that of *Metarctia* :—

Abdomen alas posticas vix superans.—POLYMONA.
Abdomen alas posticas dimidio superans.—METARCTIA.

Corpus longum, subcylindricum. Proboscis brevissima. Palpi porrecti, subnudi, mediocriter longi, caput paullo superantes; articulus 1us brevis; 3us longiconicus, 2i dimidio brevior. Antennæ thorace paullo longiores. Abdomen alas posticas plus dimidio superans. Pedes validi, longiusculi; femora pilosa; tibiæ posticæ calcaribus apicalibus longis. Alæ angustæ, posticæ apud costam convexæ. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Body long, nearly cylindrical. Proboscis very short. Palpi porrect, moderately long, almost bare, extending a little beyond the head; first joint short; third elongate-conical, not half the length of the second. Antennæ rather longer than the thorax. Abdomen extending for two-thirds of its length beyond the hind wings. Legs stout, rather long; femora pilose; tibiæ and tarsi bare; hind tibiæ with long apical spurs. Wings narrow. Fore wings straight along the costa, rounded at the tips, very oblique along the exterior border, which forms a continuous curve with the interior border; second inferior vein a little further from the third than from the first; third much further from the fourth than from the second. Hind wings convex in front. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ very minutely pectinated.

1. METARCTIA RUFESCENS.

Mas et fœm. *Ferruginea; caput, pectus, abdomen et femora rufescentia; tibiæ tarsique nigricantia; alæ anticæ macula discali nigricante, subtus rufescentes; posticæ pallide rufæ.* Fœm.—*Abdomen nigro fasciatum, subtus nigro bivittatum.*

Ferruginous. Head, pectus, abdomen and femora reddish. Tibiæ and tarsi blackish. Fore wings with an indistinct blackish

discal spot; under side reddish. Hind wings pale red. *Female.*—Abdomen with black bands; under side with a black stripe on each side. Length of the body 7—9 lines; of the wings 16—18 lines.

Var. β. Fem. Fore wings red along the costa.

a, b. Caffraria. From M. Becker's collection.
c, d. Port Natal. From M. Gueinzius' collection.

Genus ROLEPA.

Corpus crassum.—ARCTIA.
Corpus gracile.—ROLEPA.

Mas. Corpus gracile. Proboscis brevissima. Palpi porrecti, mediocriter longi, caput paullo superantes; articulus 1us brevissimus; 2us longus; 3us minimus. Antennæ mediocriter pectinatæ, thorace multo longiores. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ apice subangulatæ.

Apparently allied to the *Lithosiidæ*, and with some resemblance to the *Geometrites*. *Male.*—Body slender. Proboscis very short, not visible. Palpi porrect, moderately long, with short hairs, extending rather beyond the head; first joint very short; second long; third very minute. Antennæ moderately pectinated, very much longer than the thorax. Abdomen extending as far as the hind wings. Legs rather slender, with short hairs; hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings almost straight along the costa, slightly angular at the tips, oblique along the exterior border; interior angle rounded; first and second inferior veins contiguous at the base; third very near the second; fourth very remote.

1. ROLEPA DELINEATA.

Mas. *Cervina; thorax postice, abdomen subtus et pedes testacea; alæ fascia lata marginali flava, fasciisque duabus angustis arcuatis obliquis, una rufescente, altera alba; anticæ fascia arcuata basim versus alba, maculisque duabus rufescentibus, una discali, altera apicali.*

Male. Fawn-colour. Antennæ whitish. Hind part of the thorax, under side of the abdomen and legs testaceous. Wings with two slender curved oblique bands (the one reddish, the other white), which extend from the costa at two-thirds and three-fourths of the length of the fore wings to two-thirds and three-fourths of the length of the interior border of the hind wings; a broad gilded

yellow band between the white band and the exterior border, fringe pale testaceous. Fore wings with the bands abruptly recurved towards the costa; a reddish discal mark, and a curved white band at a little before one-third of the length; a reddish spot at each tip. Length of the body 6—7 lines; of the wings 18—20 lines.

a. Rio Janeiro. From Mr. Stevens' collection.
b, *c*. Brazil. From M. Becker's collection.

Genus RENADA.

This genus may be thus distinguished from *Sciathos*, with which it agrees in the Synopsis, page 586:—

Alæ anticæ apud marginem exteriorem valde obliquæ.—SCIATHOS.
Alæ anticæ apud marginem exteriorem subobliquæ.—RENADA.

Fœm. Corpus robustum, dense pilosum. Proboscis brevissima. Palpi porrecti, pilosissimi, mediocriter longi, caput superantes; articulus 1us brevis; 2us longus; 3us 2o multo brevior. Antennæ subpectinatæ, thorace longiores. Abdomen alas posticas paullo superans, apice lanuginosum. Pedes validi, pilosi; tibiæ posticæ calcaribus parvis apicalibus. Alæ longiusculæ, mediocriter latæ.

Female. Body stout, thickly pilose. Proboscis very short or obsolete. Palpi porrect, moderately long, very pilose, extending rather beyond the head; first joint short; second long; third rather long, but much shorter than the second. Antennæ longer than the thorax, minutely pectinated; branches of equal length from the base to the tips of the antennæ. Abdomen extending a little beyond the hind wings; lanuginose at the tip. Legs stout, pilose; hind tibiæ with small apical spurs. Wings moderately broad, rather long. Fore wings very slightly convex along the costa and along the exterior border, which is oblique, rounded at the tips; second inferior vein a little nearer to the first than to the third; third full six times further from the fourth than from the second.

1. RENADA LATERALIS.

Fœm. *Fusca; caput apud antennas flavum; thorax postice fulvus; abdomen vittis duabus fasciisque fulvis; femora fulvo vittata; alæ anticæ fascia subapicali obscuriore, maculis duabus nigris, plaga postica basali fulva.*

Female. Brown. Head yellow about the base of the antennæ, which are whitish testaceous. Thorax tawny towards the abdomen.

Abdomen tawny along the hind borders of the segments and at the tip beneath; a broad tawny stripe along each side. Femora with tawny stripes. Fore wings slightly tawny about the interior border towards the base, and with two black spots, one at the base, the other across the tip of the discal areolet; a dark brown subapical band almost parallel to the exterior border; hairs of the fringe blackish, whitish towards their tips. Hind wings a little darker than the fore wings. Length of the body 8—9 lines; of the wings 20—22 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus PORELA.

Tibiæ subnudæ.—SCIATHOS.
Tibiæ dense pilosæ.—PORELA.

Corpus pilosum, valde robustum. Proboscis non conspicua. Palpi breves, porrecti, valde pilosi, caput paullo superantes; articulus 1us brevis; 3us acuto-conicus. Antennæ thorace vix longiores. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus apicalibus minimis. Alæ mediocriter latæ. *Mas.*—Antennæ sat late pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Body, pilose, very stout. Proboscis very short, not visible. Palpi short, porrect, very pilose, extending a little beyond the head; first joint short; third acute-conical. Antennæ hardly longer than the thorax. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with very minute apical spurs. Wings moderately broad. Fore wings straight along the costa till near the tips, where they are very slightly convex, hardly angular at the tips, oblique along the exterior border; interior angle obtuse and somewhat rounded; first and second inferior veins contiguous at the base; third much further from the fourth than from the second. *Male.*—Antennæ rather deeply pectinated. *Female.*—Antennæ minutely pectinated.

1. PORELA VETUSTA.

Nigra, albo varia; caput antice palpi et antennæ lutea; abdomen apice album; pedes lutei, nigro fasciati; alæ albo maculatæ, anticæ apud marginem exteriorem cinerascentes.

Black. Head partly clothed with white hairs, luteous on each side and in front, and at the base of the antennæ. Palpi and antennæ luteous. Thorax whitish in front. Abdomen white at the tip. Legs luteous, with black bands; fore femora and fore tibiæ

with white hairs. Fore wings grayish along the exterior border, with white spots on the fringe, with a white discal dot, and with a white spot between the dot and the base of the interior border. Hind wings with whitish spots on the fringe. *Female.*—Thorax white on each side. Fore wings with the white spots much larger than in the male. Length of the body 4½—6 lines; of the wings 11—16 lines.

a, *b*. Sydney. Presented by E. Doubleday, Esq.
c. New South Wales. From Mr. Stevens' collection.

Genus MELORA.

Proboscis mediocriter longa.—GIPPIUS.
Proboscis brevissima.—MELORA.

Mas. Corpus pilosum, valde robustum. Proboscis brevissima. Palpi graciles, porrecti, pilosi, caput vix superantes; articulus 1us brevis; 3us minutus, conicus. Antennæ simplices, gracillimæ, thorace non longiores. Abdomen alas posticas paullo superans, apice fasciculatum. Pedes validi, pilosi. Alæ sat angustæ.

Male. Body very stout, pilose. Proboscis very short. Palpi slender, porrect, pilose, hardly extending beyond the head; first joint short; third minute, conical. Antennæ simple, very slender, not longer than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings, tufted at the tip. Legs stout, pilose. Wings rather narrow. Fore wings opaque, straight along the costa, rounded at the tips, oblique and hardly convex along the exterior border; second inferior vein about thrice further from the third than from the first; third much further from the fourth than from the second.

1. MELORA AMYGDALOIDES.

Mas. *Lutea; thorax fusco varius; pectus, abdomen basi rosea, coxæ; femoraque abdomen nigro quadrifasciatum, disco subtus nigro; alæ anticæ ferrugineo-fuscæ, maculis sex margineque exteriore luteis; posticæ nigricantes, semihyalinæ, marginibus rufescentibus.*

Male. Luteous. Palpi yellow. Antennæ brown. Thorax clothed with brown hairs on the disk and on each side in front. Pectus and abdomen towards the base bright rose-colour. Abdomen with four slender black bands; disk of the under side black. Coxæ and femora rose-colour. Fore wings ferruginous-brown, luteous

along the exterior border, and with six large pale luteous spots. Hind wings blackish, semihyaline, with reddish borders. Length of the body 6 lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus ANDALA.

Tibiæ posticæ calcaribus minimis.—LACYDES.
Tibiæ posticæ calcaribus sat longis.—ANDALA.

Mas. Corpus gracile, lineare. Proboscis brevissima. Palpi porrecti, mediocriter longi, caput paullo superantes. Antennæ mediocriter pectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor sat longis. Alæ angustæ.

Male. Body slender, linear. Proboscis very short, not so long as the breadth of the head. Palpi porrect, moderately long, extending rather beyond the head; first joint pilose, much longer than the second; third minute, acute-conical. Antennæ minutely pectinated, much longer than the thorax. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four moderately long spurs. Wings narrow. Fore wings nearly straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle obtuse and rounded; first, second and third inferior veins almost contiguous at the base; fourth remote.

1. ANDALA UNIFASCIA.

Mas. *Alba; caput antice fuscum; thoracæ e maculis fuscis univittatus; abdomen supra luteum, e maculis fuscis trivittatum; pedes fusco fasciati; alæ anticæ fascia unica maculisque nonnullis fuscis.*

Male. White. Head brown in front. Palpi and antennæ brown. Thorax with a band of four brown spots. Abdomen luteous above, except at the base, with three rows of brown spots. Legs with brown bands. Fore wings with an entire rather broad brown band before the middle, and with various brown spots, which form three or four imperfect brown bands. Hind wings with two brown spots near the costa, and with two more by the interior angle. Length of the body 5½ lines; of the wings 14 lines.

East Indies. In Mr. Saunders' collection.

Genus NORAPE.

The hind tibiæ without spurs distinguish this genus from all in the Synopsis.

Mas. Corpus gracile. Proboscis obsoleta? Palpi graciles, brevissimi; articulus 1us brevissimus; 3us minimus. Antennæ sat late pectinatæ, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes gracillimi, longiusculi; tibiæ posticæ calcaribus nullis. Alæ mediocriter latæ.

Male. Body slender. Proboscis obsolete? Palpi slender, very short, not extending near so far as the head; first joint very short; third very minute. Antennæ rather deeply pectinated, about two-thirds of the length of the body. Abdomen extending as far as the hind wings. Legs very slender, rather long; hind tibiæ with no spurs. Wings moderately broad. Fore wings very slightly convex in front, rounded at the tips, oblique and slightly convex along the exterior border; second inferior vein a little nearer to the first than to the third; third more than twice further from the fourth than from the second.

1. NORAPE PUELLA.

Mas. *Candida; caput pallide flavum, subtus nigrum; palpi toti, femora tibiæque extus nigra; abdomen luteo fasciatum; alæ argenteæ, anticæ vittis interruptis nigris.*

Male. Pure white. Head pale yellow, black beneath. Palpi black. Antennæ with luteous branches. Femora and tibiæ black on the outer side. Abdomen with luteous bands on the hind borders of the segments. Wings silvery white. Fore wings with slender interrupted black stripes, which are most complete in front of the discal areolet. Length of the body 4—4½ lines; of the wings 10—11 lines.

Rio Janeiro. In Mr. Fry's collection.

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